

THE TECHNOLOGY REVIEW

RELATING TO THE MASSA-
CHUSETTS INSTITUTE
OF TECHNOLOGY



PUBLISHED AT
491 BOYLSTON STREET BOSTON BY THE
ALUMNI ASSOCIATION

technology review

Published by MIT

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The Technology Review

VOL. XV.

APRIL, 1913

No. 4

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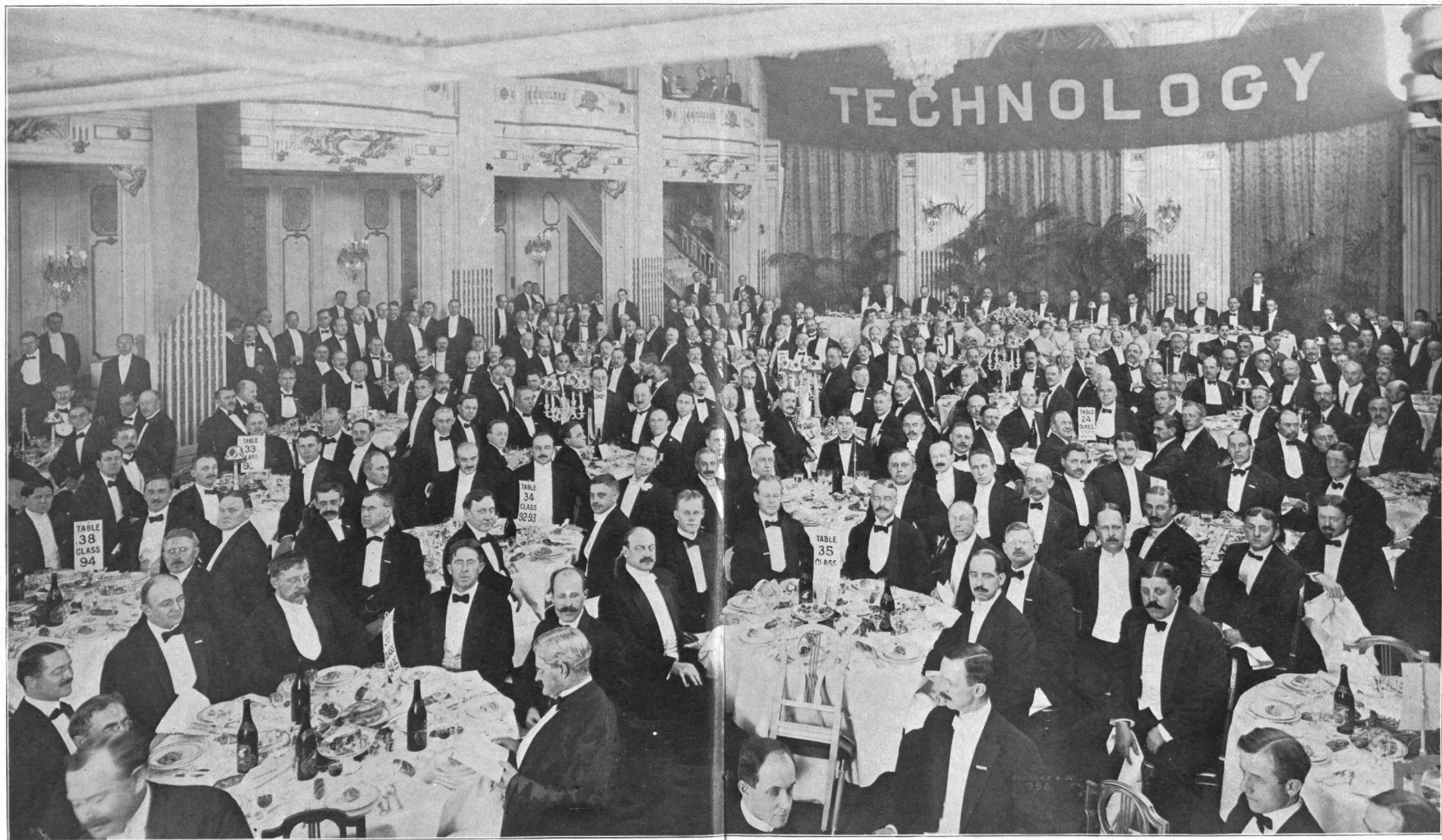
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ANNUAL DINNER OF THE ALUMNI ASSOCIATION, THE PLAZA, NEW YORK, JANUARY 18, 1913

The Technology Review

VOL. XV

APRIL, 1913

No. 4

THE QUESTION OF COURSE IX

Need of men of breadth and initiative who have been educated in an atmosphere of practical modern endeavor

The question of the rehabilitation of Course IX, the course of general studies, is difficult of settlement because, paradoxical as the statement seems, it is decisively answered by the principles which underlie the very foundation of the Institute. The difficulty comes in the difference between the logical conclusions which follow from the nature of those principles and the opinions of those in authority. Those who abolished the course would hardly have taken the trouble further to consider the matter, as has been done recently, had it not been that facts more real and more pressing than the obvious reasons by which they had been led to a decision were fighting against them. In the end—at least so I believe—the answer, against whatever odds and in spite of whatever delay, must ultimately be in the affirmative.

The Massachusetts Institute of Technology has succeeded as it has because of the efficiency with which it has filled a need at once urgent and until the school existed, unsatisfied. The magnificently penetrating mind of Dr. Rogers saw that a new sort of education was demanded, and he set himself to the establishment of an institution which should give it. The common mistake is to assume that he had in mind an engineering school in the old sense. He recognized that for the time at least the colleges of the country had lost touch with the age; that they no longer represented the convictions of the thinking public; that in plain reality academic education had come to be rather a luxury or an ornament than an equipment for practical life. The condition of

things was—and is —appreciated by many of the men directing college work, but it was too completely secured by custom, by tradition, and by popular indifference to be materially improved by any means in sight. The Institute's first President was keenly alive at once to the practical applications of scientific ideas and to the equally practical if less tangible worth of intellectual and artistic culture. He felt the vital necessity in modern civilization of training workers for material ends to a realization of values other than material. He was sensitive to the danger which was and is so pressing, that in the stress of materialistic interests this strenuous and eager country should fatally cripple its force by neglect of all issues not visibly and directly productive. The prime and essential truth upon which he founded the Institute was the necessity of bringing the humanities once more to play their part in daily life and daily needs. The colleges taught the humanities as fine and high traditions; Dr. Rogers determined that a school should exist where they should be woven into the same web with the professions as a part of the very stuff of daily life.

In the plan which Dr. Rogers published in 1861, he says:

"The time has arrived when, as we believe, the interests of Commerce and the Arts, as well as of General Education, call for the most earnest coöperation of intelligent culture with industrial pursuits."

And again:

"In the features of the plan here sketched, it will be apparent that the education which we seek to provide, although eminently practical in its aims, has no affinity with that instruction in mere *empirical routine* which has sometimes been vaunted as the proper education for the industrial classes. We believe, on the contrary, that the most truly practical education, even in an industrial point of view, is one founded on a thorough knowledge of scientific laws and principles, and which unites with habits of close observation and exact reasoning a large general cultivation."

The germinal idea of the Institute was just this "earnest coöperation of intelligent culture with industrial pursuits," and whether Dr. Rogers himself saw completely how revolutionary and far-reaching it was and is, he at least realized the necessity of working out the practical details of his scheme almost *ab initio*. The course in General Studies grew up logically and naturally from the fact that the Institute was not simply trying to teach men

trades, the normal aim of the technical school of old. It was not even established in response to the great and growing need of craftsmen. It took advantage of that need, and it was abundantly able to supply it; but craftsmen as such were, and are, and should be, a by-product. The school found its real work in training men who in the fields of industrial effort should be leaders. There were already schools where engineers were made; the Institute aimed to develop leaders able to direct and to utilize the labor and ability of those who were simply engineers in the craftsman sense. The pressing call for leaders in practical life brought it about inevitably if unconsciously that young men with the right stuff in them should go to the Institute, even when they had neither the peculiar abilities nor the inclination to follow engineering as a life-work. They were in sympathy with the idea of the union of "intelligent culture with industrial pursuits," although they were in training for careers of usefulness not strictly technical at all. The original idea of the school perhaps applied to their particular needs with more close although less obvious effectiveness than to those of any other class. Through them more surely than through any men of technical training could the humanities be brought once more into vital contact with the interests and needs of homely, busy, practical life.

That the general public had no appreciation of the real situation in this matter was inevitable. The fact that the course in General Studies was a departure so entirely new kept it small, and made it sure to be misunderstood. Even the authorities at the Institute seem to have been too much given to regard Course IX as a concession to human weakness, and instead of being proud of a new and important step in education, to have had a tendency to be half apologetic. The men who contributed money to the Institute could easily see the value of making good engineers; the making of good industrial leaders was less evident to them. It was intangible to the ordinary business intelligence, and came quickly to be recognized by those soliciting funds for the school as of small money-getting power. The most valuable and significant feature of any fresh scheme is generally the one likely to be least appreciated, or certainly to be longest in gaining recognition. Just as the men trained in Course IX had begun to get well on their feet so as to give a practical demonstration of the value and effectiveness of the training, the course was abolished altogether.

Whatever other causes may have had to do with this unfortunate step, the ostensible reason was that the number of students taking the course was too small to warrant the expense of its up-keep. I am personally not aware that any considerable outlay was saved by this change, for the instructing staff was not thereby curtailed; but undoubtedly the executive committee were honest in supposing—or in allowing themselves to be persuaded—that by their vote they were carrying out a measure of economy.

What pays and what does not pay in a school of this kind is a question too subtle to be determined by mere bookkeeping. The actual tuition fees from the men in Course IX were certainly not great in amount. They should have been, and if the course had been treated as of importance, easily could have been as large as those of any of the smaller departments now in operation. The actual value to the Institute, however, was not a matter simply of fees. In the reckoning up of the value of Course IX to the Institute must be included the importance of having among its alumni men holding influential positions in lines of business other than engineering; the strengthening of the position of Technology by an increased public recognition of its influence in the field of broad and progressive education, with the wider vindication of the fundamental principle upon which rests our whole scheme of training; the direct and the indirect influence upon the undergraduates pursuing technical courses of the frank insistence upon the worth of the humanities in practical life. Any one of these things would seem to me a sufficient reason for the maintenance of Course IX, although personally I should incline to give greatest weight to the third. To consider whether the course “pays” without taking all these points into the account is to treat the question with inexcusable superficiality.

Some of the objections which have been made against the reestablishment of the course should perhaps have a word. One may easily smile at the objection that a department which was discontinued because it had too few students should not be rehabilitated lest it have too many; but the objection that it might interfere with the business classes of other schools shows—if I may be pardoned for saying it—something like a failure to get at the heart of the problem. The proposition that Course IX is superfluous because of the work done by other institutions has exactly as much weight—and no more—as the plea that the tech-

nical courses at the Institute should be curtailed lest they interfere with the work of engineering schools. The business education which Technology aims to give, like the training in professional subjects for which it labors, is different in principle from that of the business colleges. Here as everywhere the endeavor at the Institute is to train men of breadth and initiative, peculiar educationally in that they have been taught in an atmosphere of practical, modern endeavor, and have been given the humanities as these are interpretive of and interpreted by real life.

From a letter recently received from a Course IX man now holding an important position in New York, I take the liberty of quoting a passage which bears directly on this point:

"Of the hordes of business men that I have met I have found only a very few who have the slightest conception of business as anything more than mere borrowing and paying, buying and selling. The manufacturers, as a rule, I have found to be lacking in a full appreciation of the possibilities that lie, within their reach but beyond their knowledge, in the scientific world.

"Some of the colleges . . . are striving to remedy this condition in a certain measure by courses in so-called 'Commercial Science.' They are striving to give business men a broader outlook. But as far as I have been able to determine, these institutions are very much under the influence of accountants, and their products seem to be little better than well-educated bookkeepers. There are a few notable exceptions among the graduates of the commercial courses of some of the universities, but those exceptions are, as a rule, men who have been trained more by experience than by teaching. It seems to me that Dr. Rogers' idea, which was so far in advance of his day, has not yet been carried to its conclusion by any institution, and I doubt if any institution other than a school of technology can carry it out to the full measure of its possibilities."

The whole letter is worth quoting, did space allow, but this paper has far exceeded the space to which I had intended to confine it. I can only add that the suppression of Course IX has always seemed to me not merely the discontinuance of a course which was turning out an excellent product, but the abandonment as well of a vital principle. The course in General Studies was not only an essential feature of Dr. Rogers' schemes, but it was the most original. The Institute led in an educational idea which must

take a high place in the future because it is a direct deduction from the logic of modern conditions. It is not too late to retrieve that error, and to accept upon a vexed question the answer to which is given by the facts of life today.

ARLO BATES.

Alumni Night at the Opera House

The annual success of the Tech Show has called much attention to the merits of this performance from the outside public as well as the alumni. In the past, however, it has been impossible to get a theatre for an evening performance so it has been given in the afternoon, generally at one of the large theatres of Boston. At the earnest request of many alumni, arrangements have been made to secure the Boston Opera House for Thursday evening, April 17, and the Alumni Association recognizing the merit and enterprise of the Tech Show has appointed a committee from its members to make this occasion a society event for alumni as well as undergraduates alike.

The management of the Show has very generously reserved a large number of boxes and about half of the auditorium for the alumni, it being estimated that a very large number of the latter will attend.

Not only are the book, music and lyrics written by Technology undergraduates but the entire performance, including scene shifting, spotlights, etc., will be in charge of students. The Technology orchestra which has been giving star performances this winter will furnish the music. It is to be a brilliant All Technology affair and it is believed that the house will be filled to the limit of its capacity.

The generous patronage of the alumni will be doubly useful this year because of the recently announced crisis in athletic affairs due to the failure of the Show to make its usual quota of profit last year.

NEW MEMBERS OF THE CORPORATION

The Corporation elects three new Life Members to fill vacancies in its ranks

At the meeting of the Corporation of the Institute held March 12, Theodore N. Vail, William Endicott, Jr., and Everett Morss, '85, were elected life members of the Corporation. These life members take the place of A. Lawrence Rotch, '84, deceased, and Senator W. Murray Crane and C. C. Jackson, resigned. Francis R. Hart, '89, was elected treasurer in the place of William B. Thurber, '89, resigned, and a new office was created, that of assistant treasurer, which will be filled by Frank H. Rand, bursar. Mr. Rand will also continue the head of the bursar's department.

Mr. Vail has been acquainted with the work of Technology for many years. As pioneer in the telephone field he early made use of the expert service of the Institute staff and employed many Tech men in developing the great telephone system of which he is now president. Mr. Vail is a member of the executive committee of the Society of Arts and through his instrumentality the American Telephone & Telegraph Company has recently presented to the Institute one of the most complete electrical libraries in existence and signified their intention of appropriating a considerable sum for a term of years for electrical research. Mr. Vail is president of the American Telephone & Telegraph Company, the Western Union Telegraph Company and the New York Telephone Company. He is a director in many corporations in the United States and London.

William Endicott, Jr., is a son of William Endicott who has for so long been a valuable member of the Technology Corporation. He is a graduate of Harvard University and is at present one of the overseers, he is a member of the firm of Kidder, Peabody & Company, bankers, and is directly interested in a large number of corporations principally in New England.

Everett Morss, '85, has been identified with the development of the Institute during the last ten years. Representing his class on the Walker Memorial Committee he was instrumental in raising a large sum of money and in 1904 became chairman of the Income

Fund Committee which raised \$250,000 from the alumni to be devoted to the general purposes of the Institute at a time when it was in a serious financial condition. He has filled a number of offices in the Alumni Association, becoming president in 1906 where he remained for two terms. In 1908 he was elected a term member of the Corporation and later became a member of the executive committee. His term membership in the Corporation expires this year. Mr. Morss is president of the Simplex Wire & Cable Company vice-president of the Simplex Heating Company, and a trustee of the Morss Real Estate Trust.

Mr. Hart has been directly interested in the development of the Institute for a number of years. He was treasurer of the Institute from October 1, 1907 to December 1, 1909, being succeeded by Mr. Thurber. Mr. Hart's return to the Institute adds much strength to the organization, at a time when the best talent is most needed. Mr. Hart is a director in a large number of corporations and is at present the vice-chairman of the board of directors of the Old Colony Trust Company, Boston.

Members of classes that have graduated during the last decade who are acquainted with Bursar Rand will be especially pleased to learn of his appointment to the office of assistant treasurer. Besides his office of bursar, Mr. Rand has represented the business side of the Institute most creditably and has justly earned the promotion to the new office created by the Corporation.

Philadelphia Club's Chemical Dinner

The Technology Club of Philadelphia gave a "chemical dinner" March 27, the first of a series of departmental dinners to be given this year. The banquet room bore evidences on all sides of a chemical laboratory and beakers, test tubes and retorts were used in serving the courses. S. S. Sadtler, '95, was toastmaster and responses were made by Dr. William P. Wilson, director of the Philadelphia Museums, A. A. Ayer, Dr. Reese, of the duPont Powder Works, and Colonel David A. Lyle, '84. Richard Waterman, '92, president of the club, read a paper entitled "How Tech Teaches Philadelphia—Mayor Blankenburg Using Her Experts To Cleanse City Departments."

STUDENT HOUSING COMMITTEE REPORTS

Alumni Council hears a remarkable report covering every phase of the Student Housing problem

The first business meeting of the council for the year was held at the University Club, March 17., the attendance being about fifty. As there was a large amount of special business to be taken up at this meeting it was voted to postpone the question of raising dues until the next business meeting, April 21.

A communication was read from President Maclaurin making a statement in regard to financial support of athletics at the Institute. It included letters addressed to the Corporation by the Alumni Council on Athletics which showed that a crisis had been reached and that some dependable way of financing athletics was necessary. The Tech Show which has turned over as much as \$1,500 reported a profit of only about \$300 last year. This is practically all that was contributed from undergraduate sources, except the proceeds of an entertainment given by some of the students which netted a substantial amount. Dr. Rockwell, member of the Alumni Council on Athletics, supplemented President Maclaurin's letter and moved that a committee of three be appointed by the chair to consider the matter of financing athletics and report to the council at the meeting to be devoted to the undergraduates, March 31. The committee appointed was Dr. Rockwell, '96, Dean Burton, Carl Gram, '09, and W. R. Mattson, '13, president of the Institute Committee. Major Briggs '81 also addressed the meeting showing what had been accomplished for athletics and urging better support.

M. L. Emerson, '04, announced that the management of the Tech Show, partly at the suggestion of the alumni, have secured the Boston Opera House for Thursday afternoon and evening, April 17, and he suggested that the alumni make the evening performance a social event in Technology life and at the same time help out the financing of athletics in a handsome way. The Show management has set aside a large proportion of the boxes and about half of the house for the alumni. He suggested that the Alumni Association send out notices to the local alumni and moved that an

honorary committee to take charge of this event be appointed by the chair. This motion was carried and the following honorary committee was appointed: Charles M. Baker, '78, John L. Batchelder, '90, A. Farwell Bemis, '93, Arthur T. Bradlee, '88, S. Parker Bremer, '93, F. H. Briggs, '81, Harry W. Cumner, '83, Eben S. Draper, '78, Charles W. Eaton, '85, Francis W. Fabyan, '93, Frederic H. Fay, '93, Charles Hayden, '90, Franklin W. Hobbs, '89, H. J. Horn, '88, Henry Howard, '89, A. D. Little, '85, Frank L. Locke, '86, Guy Lowell, '94, Dr. Richard C. Maclaurin, Charles T. Main, '76, Dr. Samuel J. Mixter, '75, James P. Munroe, '82, Odin Roberts, '88, Dr. J. Arnold Rockwell, '96, E. W. Rollins, '71, J. W. Rollins, '78, Walter B. Snow, '82, Col. W. D. Sohler, '78, Charles A. Stone, '88, George F. Swain, '77, Edwin S. Webster, '88. A. T. Bradlee, '88, is chairman of the committee.

Benjamin Hurd, '96, addressed the council in regard to the presentation of the Tech Show in New York which he felt might show a loss. He also urged greater publicity of Institute matters in certain New York papers.

The Student Housing Committee made its final report through C. W. Eaton, '85, a member of the committee. This report was complete in every detail, covering every point to be taken into consideration in connection with the dormitories on the new site. It was remarkable in its thoroughness and made a profound impression on the Alumni Council who felt that the recommendations of the committee were based on a most thorough and careful research into this especially difficult problem. The report is of such moment to Tech men that it will be printed in a subsequent number of the TECHNOLOGY REVIEW.

The following is a summary of recommendations made by the Student Housing Committee.

1. That about eight acres of the new site be set aside for dormitory purposes.

2. That the dormitories be located preferably along the esplanade; otherwise, along Massachusetts Avenue, with interior quadrangles parallel to Massachusetts Avenue, the outer building line 20 feet from the street, and a suitable masonry and iron fence along the property line.

3. That initial provision be made for at least 500 students, probably 632, and possibly 800.

4. That the stairway type of dormitory be adopted with a height of four and five stories.

5. That three kinds of student rooms or suites be provided in the following proportions:

Provision for 25 per cent. in single rooms for single occupancy.

Provision for 25 per cent. in single suites for single occupancy.

Provision for 50 per cent. in double suites for double occupancy.

6. That all student accommodations be as nearly uniform as possible in general character and service.

7. That such accommodations be supplied with the "main pieces of furniture."

8. That bathrooms be provided on each floor, but that suites and rooms be *not* provided with private baths.

9. That as much inducement as practicable be offered the students to take outdoor exercise.

10. That "fresh air sleeping rooms" be provided as far as possible.

11. That dormitories be of fireproof construction, certainly of nothing inferior to "slow burning" construction.

12. That the members of all four classes be mixed as much as possible throughout the dormitory system.

13. That rooms be assigned by lot, with a reasonable degree of individual choice as to stairways.

14. That no "lounges" be provided in stairways.

15. That no dining accommodations be provided in stairways except as mentioned below.

16. That the conduct of the dormitories be in charge of an officer of the Institute, who should be a Faculty member.

17. That such officer be assisted in supervision and in the maintenance of order by a student committee or council.

18. That the serious side of life, as exemplified in religion, should be fostered by the Institute authorities.

19. That the dormitory system be ready for occupancy and use at the same time as the educational buildings.

20. That a general dining hall or commons be provided near the dormitories but easily accessible also to the educational buildings, for the use of all students.

21. That such commons should provide:

a. Good, wholesome fare at minimum cost, and service as attractive and varied as may be had elsewhere.

b. Homelike conditions as far as practicable.

c. Dining rooms so arranged as to foster the intimacies and home atmosphere of the small table, and at the same time to ensure the important general bringing together.

d. Opportunities for very large gatherings by arrangement of the larger halls to permit of their convenient use in combination.

e. Such service as may be required in the Walker Memorial.

22. That no effort or expense be spared to provide the best possible equipment in storerooms for provisions, preparing rooms, kitchens and serving rooms for the most economical systematic and hygienic method of handling the food supplies, even at the expense of space and furnishing the dining rooms themselves. (Study West Point in this respect.)

23. That the administration and direct management and employment of all servants and the purchasing of all material be in direct charge of a thoroughly competent director and teacher, preferably with experience in business and expert in dietetics. The same officer might be in charge of the dormitories.

24. That the director of the commons be assisted in supervision and the maintenance of order by a committee or council of students.

25. That every possible step be taken to keep non-fraternity and fraternity men in as close physical and social contact as possible, looking to this end that the fraternities be encouraged to lease sections in the general dormitory system of the Institute.

26. That the same opportunities be offered to every social club of similar standing of scholarship and financial responsibility.

27. That the Corporation of the Institute present to fraternities with a definite proposition, giving them an idea of the accommodations which they could expect in the dormitory quarters or at least the fundamental conditions under which such quarters could be obtained.

28. That the fraternities be not allowed to rush or to pledge any freshmen previous to the opening of the second term.

29. That fraternity members be not allowed to live in fraternity houses until the beginning of their second year.

30. That definite records be kept of the scholarship standing of all fraternities at the Institute and that such records shall be made public to all students of the Institute.

31. That your committee be discharged.

The members of the committee were A. F. Bemis, '93, C. W.

Eaton, '85, Lawrence Allen, '07, Frank A. Bourne, '95, and Frank L. Locke, '86.

Prof. Tyler, '84, chairman of the Walker Memorial Committee stated that his report was in a plastic condition and he would only present such of it as was intimately connected with the problem of the Student Housing Committee. The committee will be ready with its final report at the next business meeting of the council on April 21.

A Crisis in Athletics

It has just been announced that due to the failure of the Tech Show last year to turn over its usual quota to the Institute Committee to be used principally for athletics, the Advisory Council on Athletics is facing a deficit much larger than it has ever had before. It amounts to about \$1,100 and unless this can be raised during the remainder of the spring term a number of athletic features will have to be dropped. The matter was brought up at the last meeting of the Alumni Council by Frank Briggs, '81, and Dr. Rockwell, '96, of the Advisory Council on Athletics. In view of the financial undertakings of the alumni it would be impossible for this body to be of assistance at this time although a number of individuals may take an interest in the matter.

It is a responsibility that should fall principally upon the undergraduates and the whole enterprise should be put on a more substantial footing. The only resources of the athletic council consists of the Show money and what little is taken in from gate receipts which we understand is trivial. The Institute Committee has taken the matter up in earnest and it is likely that some plan for substantially supporting athletics will be worked out in the immediate future.

How many of our readers ever take the trouble to look through the first pages of the TECHNOLOGY REVIEW and note the activities of the alumni organizations? The committees are kept up to date each month and the change in personnel of the boards of officers of local associations, fixed luncheons, etc., are noted as soon as information is received.

A RECORD REGISTRATION

Four hundred and thirty college men at the Institute—Ratio of students to instructors 6.8 per cent.

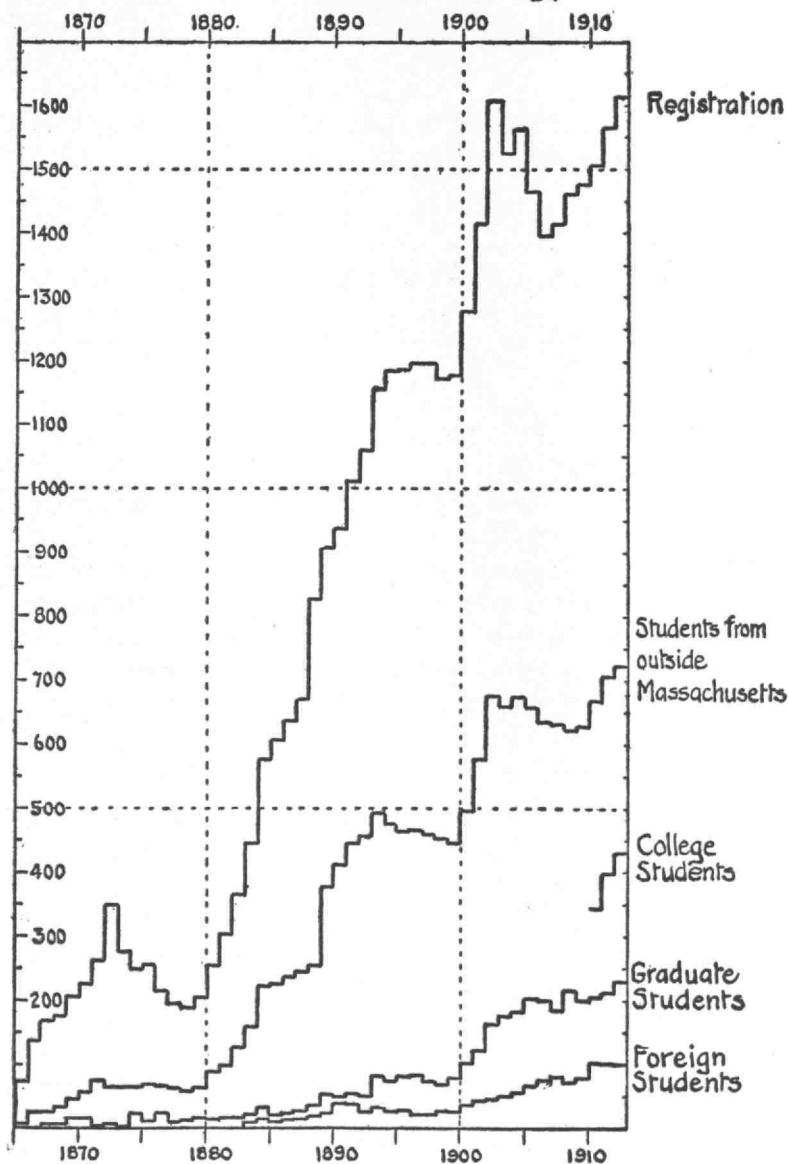
Among the many interesting features in the President's report for 1912, the report of the registrar is of particular interest. The catalogue contains 1,611 names of students, an increase of forty-five over the registration of last year or nearly 3 per cent., the number of students being larger than ever before in the history of the Institute. This is also true of the number of college graduates. In 1902 the number of college graduates was 160 while today it is 230, or about 14 per cent. of the total enrollment. The number of students who have attended a year or more at another college has risen in three years from 347 to 430 being now about 27 per cent. of the entire student body. The number of students from Massachusetts continues to hold about the same relation to the others as it has for several years, about 55 per cent. of the student body.

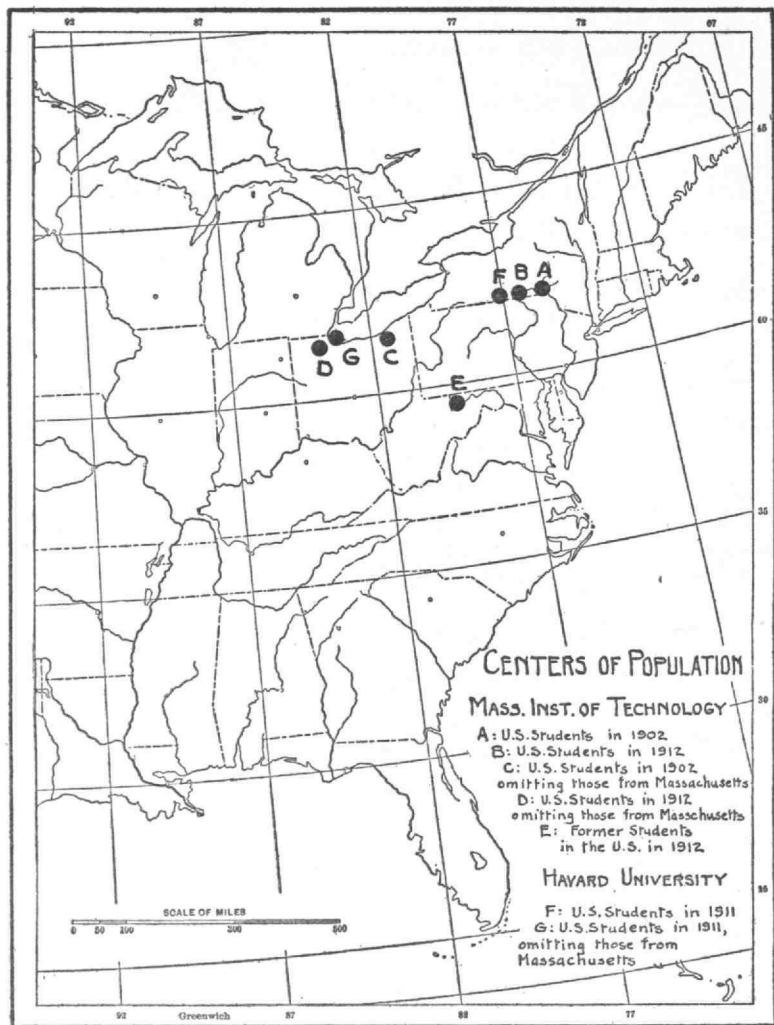
Twenty years ago we had only ten foreign students; now we have 100, a larger percentage than any other large American college. The number of countries represented has risen in ten years from fifteen to twenty-three. Ten years ago Canada sent us thirteen students, this year it sends thirty-seven. Registrar Humphreys has prepared a map showing interesting facts in connection with the center of population of students and alumni which is printed herewith.

We have this year fourteen women students. Two of these are in the first year, one is studying architecture, five chemistry, two biology, one chemical engineering, and three are taking special studies.

The number of the instructing staff has risen to 254 showing a ratio of students to instructors of 6.8 per cent. compared to 7.5 per cent. last year. This is probably the closest relation of students to instructors that can be found in the United States. The ratio has decreased although the number of students is much larger.

Massachusetts Institute of Technology





Scholarship assistance given during the year 1912 amounted to \$21,550, the total number assisted from scholarship funds being 187. In addition eighty students were aided by the state. The principal awards were made to second and third-year students.

Combining the engineering courses, civil, mechanical, mining, electrical, chemical, sanitary engineering, naval architecture and electro-chemistry, it is found that in seven years the number of

students in these courses has varied but little from 82 per cent. The percentage of students taking architecture is fairly uniform but is slowly growing. The group of students taking chemistry, biology, physics and geology continues at about 8 per cent. The largest professional course is that of mechanical engineering which is growing and has gained 10 per cent. this year over last. In the registration in chemical engineering there is, however, an increased percentage and also in chemical engineering, naval architecture and electro-chemistry. The increase in naval architecture from nineteen to twenty-five is due to a large extent to the Chinese students. There is a marked decrease in the number of students who have elected to take the course in mining engineering.

Students Complete Their Organization

The students of the Institute have just voted to form themselves into the "M. I. T. Undergraduate Association," and have adopted a new constitution. The Institute Committee is a representative body of Tech students. Of late there has been some question as to the legality of the assumption of powers, and it was thought best to submit an entire new constitution and allow the student body to accept or reject it by vote after a complete discussion.

In the preamble of the constitution is written:

"WHEREAS, it seems wise that all activities among the students of the Massachusetts Institute of Technology should be so organized and conducted as to work for the good of the student body, it is fitting that some central organization, chosen and controlled by the student body, should have and exercise general powers of supervision over all individual activities in so far as they affect the student body as a whole."

Under this constitution, all registered students become members of this association by virtue of their registration at the Institute. All legislative and executive powers are to be vested in a representative body to be known as the Institute Committee. All acts and decisions of this committee shall be binding on the students, unless within ten days fifty students shall petition in writing, whereupon, the matter in question must be submitted to the entire student body for a vote.

DESPRADELLE MEMORIAL MEETING

His rare professional and personal qualities and his influence on architecture in America

Boston architects and former associates of the late Prof. Désiré Despradelle honored his memory at a meeting in Copley Hall on Monday evening, March 10; opening at the same time an exhibition of the distinguished architect's sketches and drawings. Mr. R. Clipston Sturgis conducted the meeting which was held under the auspices of the Boston Society of Architects of which he is president, the Massachusetts Institute of Technology and the Boston Architectural Club. The speakers were President Sturgis, President Richard C. Maclaurin of the Institute, Mr. Guy Lowell, Rev. W. B. King, Rev. Reuben S. Kidner and Mr. Thomas Hastings of New York. A feature of the meeting lay in the fact that Messrs. Lowell, Hastings and Prof. Duquesne, had been students at the École des Beaux Arts in Paris under the same great master, Louis Pascal, who was the teacher of Despradelle. To Prof. Duquesne there is especial praise to be accorded since in the midst of an unusually busy season he gave liberally of his time and talents in the arrangement of the exhibition. The great meeting was through the choice of the speakers not only an appreciation of Despradelle but appreciation from the lips of those who were themselves familiar with his splendid training. Pascal is still living, a resident of Paris, his age is seventy-six and he is a notable figure in his country, being member of the Institut de France, Architect of the Bibliothèque National and Inspecteur Général des Bâtiments Civils.

What Prof. Despradelle meant to Technology and to American architecture was set forth by the various speakers while personal testimonials to his lovable character came from the lips of his clerical friends.

So far as the Institute itself was concerned its course had already been laid by Prof. Chandler and was under way in excellent fashion. At real personal sacrifice Despradelle came to join the school in America. He was as a missionary bearing to the land of great promise the principles and teachings of his brilliant native country,

France, and his unapproached alma mater, the Beaux Arts. He brought to the students of Technology the liveliest interest, the greatest enthusiasm. These and the sterling principles of his profession he upheld and disseminated. With the splendid men already in the Institute Despradelle formed a company that worked together and it is this union of qualities in the leaders that has placed Technology where it is, the leading school in the country; the model upon which the newer architectural schools are based and oftentimes with a graduate at its head. This was what Dr. Maclaurin meant when he said, "It would take a map of our whole country to follow the campaigns of all his pupils."

It was President Sturgis who outlined the history of architecture in this country. It had been a dilettante occupation for men of culture, it now demands the special education of a skilled engineer for its foundation. Through such a time of change as this Prof. Despradelle conducted his classes and his spirit was equal to the unusual demands. He was a teacher filled with inspiration and enthusiasm and through his fortunate temperament he was able to transfer these qualities to his pupils. Enthusiasm is vital to the study of architecture for it will invest the drudgery with interest and will help the worker reach the mark that his inspiration has set up before him. "In that he presented architecture to his students in its truest light," said Mr. Sturgis, "we owe a debt of gratitude to Despradelle."

"Prof. Despradelle realized to the full," said Dr. Maclaurin, "the value of scholarly foundations and I need not remind you that he was trained in the best and most rigorous of schools. France is a country to which architects look with respect, if not for their admiration of its architecture, at least because it has devoted itself more seriously and more successfully than has any other country to the problems of teaching architecture. Despradelle was thoroughly conversant with the methods of the French schools and was wonderfully apt in applying them to the conditions that exist in this country.

Then speaking of his personal qualities Dr. Maclaurin said, "His sympathy was specially valuable when he dealt with the individual student, close association between master and student being a most important characteristic of the school he represented. . . . To develop individuality in the student was his aim. His sympathy and insight gave him marvelous skill in discovering

latent powers and he would spend weeks in encouraging a young man to find himself rather than to force him into a way that was not naturally his own." Dr. Maclaurin further outlined the vivacious enthusiasm of the great French teacher. This was so contagious that no one failed to catch some of it. All the students were ready to work without stint because in him they recognized a great worker. "His name will live in the loyalty and devotion of every one of his students, and passing into the traditions of a great school of architecture, his influence can never vanish from the land."

In his brief address Mr. Guy Lowell outlined the life at the Beaux Arts, and showed how in the intimacy of patron and pupil, the bond was enormously strong. Despradelle drew his skill from his great master, Louis Pascal, and the latter regarded him always as a favorite pupil and a devoted friend. "Tell me of my dear Despradelle," was his first query of any one from America.

Thomas Hastings, one of the firm of architects that has brought into being the great New York Public Library at 42d Street, recognized in Despradelle a great teacher. "In America the progress of architecture has been remarkable and the development is due to American schools," he said. "The Massachusetts Institute of Technology has been the leader in the work. Despradelle's influence is felt everywhere. His teachings were of true and far-reaching principles of design, not limited by country, but built on the traditions of all times. There have been great changes in architectural methods and few have done more than Despradelle to bring about the better feeling." "He has gone before," said the speaker in conclusion, "but his influence is undying."

The Rev. Mr. Kidner knew him as a friend and testified to his noble qualities and unfailing spirits. "It was a privilege to have known him," he said. "When he said he was glad to see you, you were assured that he was really glad," and the Rev. W. B. King dwelt enthusiastically on his lovable qualities.

The fact that in this issue of the REVIEW there are nearly a hundred pages of news from the classes indicates the increasing interest that Tech men have for their classmates and for the Institute. The secretaries are to be congratulated on the presentation of so much interesting matter relating to the graduates. It is one of the main reasons for the success and growth of the Alumni Association.

PROFESSOR DESPRADELLE'S DRAWINGS

Exhibition of his work in Copley Hall attracted wide notice

The exhibition of sketches and drawings of Prof. Despradelle required both Copley Hall and Allston Hall for their display. They included more than two hundred items, testifying at once to the industry and the talents of the great Technology teacher.

The magnificence of some of the drawings fairly takes away one's breath, for in the competitions there were plans or perspectives as large in area as the floor of a hall-room in a Boston dwelling.

"No one can stand in the presence of the magnificent Beacon of Progress," writes the art editor of the *Boston Daily Advertiser*, "without a feeling of enthusiasm at the inspiring ideal, which pierces the sky, yet treads the earth. It is itself typical of Despradelle, in all his works, lofty and ennobling, yet when practice is concerned not violating possibilities.

"One marvels at the product of a single brain, which is here set forth and one realizes, that which is not always so apparent, that art and architecture are sisters."

The Listener in the *Boston Transcript* noting the same great drawing says, "the finished perspective of the great monument, overtopping the Eiffel tower by half its height, a truly cloud-piercing monument is filled with spirit. The great gnomon seems in the sketch to glow with the light of the clearer skies above the veil of dust that involves the modern city. . . . The bathing establishment—a Prix de Rome composition—set in an environment possible only when some great Riverian mountain spurs cut the shore, is a suggestion that Diocletian in all his glory could scarcely have rivalled, while the stupendous Joan of Arc—also a Prix de Rome—massed against one of the sharp hills of her native province, lends itself to an apotheosis of the heroine."

The exhibition was in six portions, each one representative of one of his periods. There was work at the Beaux Arts, the military headquarters, receiving the Labarre prize, a florid fountain, Rougevin prize; a bridge across a gorge, a monument for the Pantheon and a "sky-scraper," showing how twenty-five years ago

in Paris he recognized the coming of this type of construction and invested his twenty stories with beauty and dignity.

The Prix de Rome group included the bathing establishment, the Joan of Arc monument and the drawings for an artillery museum. Studies were shown of the Phoebe Hearst competition, the final drawing having been burned in the San Francisco fire of 1906. There were many sketches of the Beacon of Progress, which gained the first gold medal at the Paris Salon in 1900. Original drawings of this were purchased by the French Government for the Luxembourg, and these with three of the larger competition drawings, were loaned with rare courtesy to Technology for the exhibit.

There were many sketches of the advisory work of Prof. Despradelle, of the Harvard Library, the Massachusetts Institute of Technology and the Boston Museum of Fine Arts, for which he was one of the advisory architects. The Technology sketches were of particular interest in that they presented in a full score of sketches the inception and evolution of the ideas that led to the drawing so widely published.

Then, again, there were portions of his work as a practicing architect, the suggestion for the improvement of Copley Square, the Berkeley Building, the drawings for the Peter Bent Brigham Hospital, the utilization of a Back Bay flat-iron lot, and many miscellaneous items.

The exhibition had a number of purposes. It was a bringing together of the principal works of one man, it was an exposition of the magnificent ideals of the Beaux Arts, from which the Institute draws its inspirations in considerable measure, and it was a presentation to the people of some of the inner life of the architect's office. The patient care with which it is necessary to evolve the ideas on paper was strongly set forth in dozens of Despradelle sketches centering about a single point. The dignity of the profession and its kinship with art was shown.

Volume I of the Technology Review Wanted

The librarian of McGill University will be glad to know where Volume I of the TECHNOLOGY REVIEW can be secured. Any of our readers who would like to dispose of this volume may communicate with the University Librarian, McGill University, Montreal, Que.

COMING ANNIVERSARY CELEBRATIONS

Nearly all the five-year classes will have special reunions this year—Some of the programs already planned

The class of '88 has the place of honor this year, having left the Institute twenty-five years ago. The occasion will be properly celebrated at the Cotocheset House, Wianno, Mass. A committee of the class has arranged to have the crowd leave Boston by automobiles on Friday morning, June 6, and partake of the hospitality of Charles A. Stone at luncheon at his summer home at Plymouth. The procession will then continue on to the Cape Cod Canal which will be inspected, arriving at its destination in time for dinner in the evening. Saturday, Sunday, and Monday forenoon will be spent at this resort. Boating, bathing, golf, baseball, and tennis will occupy the attention of the members. The annual class dinner will take place on Saturday evening, June 7. The return to Boston will be made Monday afternoon, June 10, by automobiles. A very full program is being laid out by the committee on sports and entertainment and it is expected that there will be a record-breaking attendance.

Secretary Robert H. Richards of the class of '68 is making plans for the celebration of the forty-fifth anniversary of the class, but a definite program has not yet been arranged.

The class of '73 celebrated its fortieth anniversary as the guests of a classmate, General Hayes, at his home at Buffalo, N. Y., January 11. An account of this reunion is given in the '73 class news.

Secretary Collier, class of '78 writes that his class is never much given to celebrating but will try to get together at dinner and observe the anniversary.

The class of '83 has not apparently made any arrangements for observing its thirtieth anniversary.

The class of '93 has arranged for a four days' outing, June 14, to 17 at the Hartford Yacht Club, Saybrook, Conn. This club is located at the mouth of the Connecticut River and for several years has been the rendezvous of the Technology Club of Con-

necticut Valley at its annual summer meetings. It is situated at one of the most charming points on Long Island Sound and is easily accessible from the railroad station. The class will have the exclusive use of the club house and every variety of outdoor sport is offered. On June 14 the annual class dinner will be held. The reunion is held at this point between New York and Boston in order that many New York men who might not be able to get on to Boston will be able to attend.

Secretary Russ of the class of '98 states that the Cotocheset at Wianno is to be their destination. They will leave, however, before the class of '88 arrives. The program is to go to Wianno on Friday, May 30, and stay until Tuesday, June 3.

The class of '03 is now considering having an outing at the Puritan Hotel, at Plymouth, Mass., to cover three or four days.

The class of '08 is preparing an elaborate program for its first five-year reunion. It will be held at Aberdeen Hall, Hyannis, Mass., which has been leased by the class from the 11th to the 15th of June, inclusive. Members will leave Boston on the afternoon of Wednesday, June 11, where they will enjoy all sorts of outdoor sports with side excursions to various interesting neighborhoods. Aberdeen Hall is six miles from Hyannis. It was built to be a gentlemen's club and was known as the Great Island Club. The estate connected with it covers 1,000 acres of private property, the house contains over fifty rooms. There will be bathing, fishing, golf and opportunity for playing baseball.

Smoker in Place of Pop Concert

Symphony Hall is becoming too small for our annual Pop Concert and besides this, there is a general demand for more popular music. The Alumni Association has therefore voted to hold a grand smoker this year in Mechanics Hall and has given up its regular Pop concert engagement at Symphony Hall. The date set is Tuesday evening, June 10. Elaborate plans are being made by a special committee of which George B. Glidden, '93, is chairman.

COUNTRY-WIDE ACTIVITY

What local alumni associations are doing in Pittsburgh, Manchester, Buffalo, Salt Lake City, Cincinnati, Boston, Connecticut Valley and Washington

TECHNOLOGY CLUB OF BUFFALO.—The Buffalo branch of the alumni has been flourishing and keeping up with the growth of Buffalo. We now have 100 members including the men from Niagara Falls, who are very much in evidence at all the meetings. Our last meeting was held at the Park Club and about thirty men turned out. Superintendent Regan of the Buffalo Police Department told us how to keep out of jail and how to keep others out. The talk was instructive and very entertaining. A ventriloquist followed with a very lively show using the names of the club members with good effect. Last month we started a monthly luncheon at the Buffalo Chamber of Commerce and it looks like success. We meet at 12.30 p. m. on the first Thursday of every month. The luncheon lasts one hour and is usually followed by a short business meeting.

We have just received word from Boston that Dean Burton is to be in Buffalo Monday, March 3; we have arranged a dinner at the Buffalo club for that evening and hope to hear all the latest news. Our president, William M. Corse, represented this club at New York last month and we have joined the Technology Clubs Associated, with hopes that we can have the yearly meeting in Buffalo before many years.—*H. M. Cowper, '05, Secretary, 1010 Mutual Life Building, Buffalo, N. Y.*

INTERMOUNTAIN TECHNOLOGY ASSOCIATION.—About the first of January, letters were sent to the Tech men in the vicinity of Salt Lake City announcing a dinner at the Salt Lake Commercial Club on Saturday evening, January 18. These letters gave the reason for holding the dinner on the night designated in the following sentence:

On this same night the different associations scattered about the world will be at dinner in order that the men at the annual Alumni Association banquet in New

York City may have the stimulus of the knowledge that the thoughts of Tech men for one night at least are centered in the welfare of the Institute.

On Saturday morning, January 18, the following day, a letter was sent to the Massachusetts Institute of Technology Alumni Association at the Hotel Plaza, New York City, in care of the banquet committee:

Greetings from Intermountain Technology Association at dinner Salt Lake Commercial Club to the Alumni Association. We believe with you that shoulder to shoulder Technology men stride forward to the victory of a greater Technology. With you we raise a cheer for the glory of "Dear Old M. I. T."

On Saturday evening, January 18, at the time designated, a dozen Tech men gathered at the Salt Lake Commercial Club. There are only about twenty-five such men in the vicinity of Salt Lake City. Of these there are a few who show no interest in Technology affairs. Of those who had promised to attend, four failed to appear when dinner was served. Inasmuch as a dozen were present out of a possible twenty-five, it would appear that there was a good attendance.

At the conclusion of the dinner a short business meeting was held at which Lewis Telle Cannon, '96, was elected president of the Intermountain Technology Association for the coming year. C. S. McDonald, '79, was elected first vice-president. D. H. Blossom, '98, was elected second vice-president. Gregory M. Dexter, '08, was elected secretary-treasurer. Immediately after the business meeting, B. W. Mendenhall, '02, the retiring president, introduced the toastmaster of the evening, Lewis Telle Cannon, '96.

Mr. Cannon in his introductory talk called attention to the attendance at the dinner as compared with what had been hoped for, spoke of the enjoyment which such dinners gave, and stated that this particular dinner was to commemorate the growth of Technology. He made reference to the growth of social life at Tech, its importance and the comparative lack of it a few years ago. In fact, when Mr. Cannon was an undergraduate there was only a trace of a "gym."

C. S. McDonald, '99, was then introduced as the first speaker of the evening. His subject was "Little Journeys to the Office of the Secretary of the Faculty." The introduction given Mr. McDonald implied that as an undergraduate he had made many such

journeys. This implication was denied with vehemence. In spite of the denial, Mr. McDonald stated that he had been waiting seventeen years to "get even" with the secretary of the Faculty. Having aroused the expectations of all those present by this statement, he dashed all our hopes to the ground by contenting himself with the relation of the escapades of a young Greek who had been his roommate. Judging by the stories which were related, it would seem as if the Institute had been at fault in not providing an assistant secretary of the Faculty. One of the best stories told had to do with the dilatoriness of this Greek in his attendance at lectures. Finally, after a great deal of correspondence and personal interviews, he had succeeded in obtaining a clean slate from the secretary. The next morning he started for Huntington Hall, only to arrive and find the door locked. He started to kick the door, and obtaining no answer went to the other entrance which he found unlocked. He slipped in and was successful in escaping detection as Professor Bates was at the other door trying to find out who had been creating the disturbance. Unfortunately, the attendance had been taken when the Greek finally reached his seat. He received the next day a note from the secretary requesting an explanation of his absence from the English lecture. To this the audacious response was made, "Water turned off so that I was unable to complete my toilet in time to attend the lecture." Obviously, further interviews with the secretary became necessary, the success of which would seem to indicate his long suffering and patient character.

Mr. Cannon, the toastmaster, then introduced Mr. Mendenhall, '02, who spoke on the subject "Course XV." In the introduction, reference was made to the fact that when Mr. Cannon was an undergraduate at the Institute, there were but thirteen courses. To these the Faculty of the Institute have added Course XIV. However, there is room for still another course, and Mr. Cannon introduced Mr. Mendenhall with the hint that he would furnish, on the basis of his own experience since graduating, the outlines of another course, to be known as Course XV.

Mr. Mendenhall suggested that the experiences which Tech men had after graduating were in the nature of a post-graduate course. Usually, they gave him very definite ideas as to some of the things which should be taught at Tech. Among such experiences Mr. Mendenhall suggested that possibly the first problem a Tech

graduate had to solve after graduating was how to live on \$50 a month. This was usually followed by the necessity of having at least a working knowledge of courtship, love and marriage. Then came the third problem which the graduate has to solve and which should be included in a Course XV to be given at Tech,—“How to be happy though married.” This was usually concurrent with the problem of the increase in living expenses with no corresponding increase in salary.

Aside from these more or less serio-comic problems of a graduate's life, there was one course which Mr. Mendenhall believed in all seriousness should be emphasized at Tech, namely that of public speaking. After pointing out its necessity in the life of most men engaged in engineering work, reference was made to the difficulty of obtaining speakers at an alumni dinner. This was further proof that Tech men lacked in ability as public speakers. This led naturally to a plea that those Tech men in the vicinity of Salt Lake should be loyal in their support of the local Alumni Association, especially when cognizance is taken of the few men able to belong. From this reference to the local alumni, advance was made to the broader and more important subject of loyalty to the parent Alumni Association.

Following Mr. Mendenhall, Mr. Cannon introduced O. H. Gray, '97, who with a polished address responded to “Is gray matter needed in contracting.” A neat play was made upon the name of the toastmaster by calling attention to the reception usually accorded generals by means of cannon as compared to the usual lack of such in the reception of private citizens. Mr. Gray spoke of the great honor conferred upon him, a private citizen, in being received by Cannon. This was further developed by reference to the numerous children of the toastmaster's brother as “infantry.”

Mr. Gray stated that the question as to whether gray matter was needed in contracting could be considered under three heads, first, the definition of gray matter; second, the necessity of it in contracting; and third, the achievements of Tech men.

The statement was made that gray matter was a metamorphosed condition of that garden variety of brain found at Tech in the freshman classes. This changed condition resulted in the brains of those intellectual giants which were turned out at the end of

the four year course, and who were now gathered about an alumni banquet board.

The necessity for gray matter in contracting was shown by reference to the fevers, colds, debts, etc., which were often contracted and for which no certified check was needed. Seriously, reference was made to the problem that a contractor has to face in bridges, foundations, tunnels, buildings, etc. These required all of his resources as compared with the consulting engineer's sole requirement of charm of manner.

After reference to the important work which is being done by Tech men, the statement was made that practically all Tech men were successful and reached the top. This was followed by some local hits, the climax of which was a reference to the fact that S. C. Sears, '01, was general manager of a local mining company, the *Utah Apex*.

Two additional speakers for the evening had been expected. Unfortunately, they were detained at the last moment and were unable to attend. S. C. Sears, '01, was to have spoken in response to "The Confessions of A Mexican Refugee." Inasmuch as he was recently driven from Mexico by the revolution which has been progressing more or less intermittently of late, the "boys" had looked forward to Mr. Sears talk with considerable pleasure. They were disappointed by his inability to attend the dinner. W. T. Cannon, '99, was to have spoken in response to "My contributions to the future student body of Technology." It was believed that he could speak with considerable authority on such an important subject as he has about seven children who are about equally divided between the two sexes.

In the absence of W. T. Cannon, his brother the toastmaster considered it no more than right to recount some stories of him which were amusing.

Following these stories by Mr. Cannon the different men in attendance at the dinner were called upon to recount their experiences since leaving the Institute. Mr. Wells, '06, spoke of his work of a metallurgist, Mr. Gray, '97, mentioned something of his work as a contractor. Mr. Blossom, '98, city engineer for Salt Lake, gave a very interesting reminiscent talk of his experiences after coming to the west. His story of the summer which he had spent in a survey of some government lands, the troubles in obtaining food, the flight of the contractor for whom he was working,

without paying off his men, and their final arrival in Ogden, Utah, in the late fall after many privations from cold and hunger to be arrested as hoboes, was greeted with hearty applause. C. S. McDonald, '99, described Salt Lake City as it appeared to him upon his arrival a few years ago before the main street to one of the depots had been paved. Coupled to this was the story of a western man's idea of a joke in the hanging of a cattle thief by some cowboys in such a position that some hoboes would see his body when they awoke. This "joke" Mr. McDonald had seen perpetrated at a water station on the Denver & Rio Grande Railroad. W. R. Reilly, '09, spoke of his experience in the Porcupine mining district. G. M. Dexter, '08, made reference to the control exercised by the Interstate Commerce Commission over railroads as exemplified at the Oregon Short Line. Montgomery Elliott, '10, explained his shift from the mining game to the shoe business. E. R. Pembroke, '03, emphasized the fact that he could not really be considered a Tech man as he had followed his one year at Technology by attending Columbia and graduating from that school. In addition, he outlined his mining experience since that date, and his attempt to make that as broad as possible. H. W. Druehl, '03, spoke of his shift from the shoe business which he had entered after his first year at Tech to the operation of a chain of drug stores in which he has made his success.

The evening proved to be very enjoyable. A professional pianist had been engaged, who remained with us throughout the evening and furnished the accompaniments to the various songs as they were asked for. Two old Tech men whom it had been found impossible to induce to attend a meeting of this kind before, were present and evidently enjoyed themselves. They came to the secretary afterwards and stated that they were pleased with the efforts which had been made to obtain their attendance.

All in all, those present appeared to have a good time, and their feeling in the matter was expressed by the chorus of "Dear Old M. I. T."—*Gregory M. Dexter, '08, Secretary, Box 195, Salt Lake City, Utah.*

CINCINNATI M. I. T. CLUB.—The Cincinnati M. I. T. Club has recently gone up a few. The first Tuesday in February we changed our luncheon place from the Grill Room, in the basement, to the main dining room on the ground floor of the Bismarck in

the Mercantile Library Building. This change was necessitated owing to the fact that the number is increasing and that accommodations more desirable could be obtained. We now have room for as many Tech men and their friends as care to drop in on us and we beg to assure any visiting Tech men that their place on any Tuesday from 12.30 to 1.30 is with us.

We have had the pleasure of having with us frequently this past fall and winter Aiken, '91, whose firm is putting up extensive additions to some of the factories in this vicinity and who reported very interestingly on the recent alumni meeting in New York.

We had the pleasure of congratulating A. H. Pugh, Jr., '97, on his engagement to Miss Elizabeth Worthington which was announced on February 4, the wedding to take place in the spring.

Another recent event has been the introduction of a new 1913 model Tech architect known as Woodward Garber who arrived January 17 to assist F. W. Garber, '03, in the building of more sky-scrapers (maybe he will supersede Cass Gilbert).

Ransohoff, '10, has recently accepted a position as superintendent of a new firm in this vicinity, the Ideal Concrete Machinery Company.

Technology is getting a fair proportion of its representatives in the technical side of our city administration. Besides Ellms, '93, in the waterworks, Folsom, '08, in the sanitary engineering part and Waite, '90, the city engineer. Barlow, '05, is in the engineering department and Van Hook, '06, and Morse, '03, are at work on the new sewage commission.

Plans are now under way for the annual winter meeting which carries with it the annual election of officers, more about which will be said later.—*Stuart R. Miller, '07, Secretary, 3366 Morrison Avenue, Clifton, Cincinnati, Ohio.*

TECHNOLOGY CLUB OF HARTFORD.—The annual meeting and banquet of the Technology Club of Hartford was held at the Hartford Club, March 1, twenty-two of the seventy-five members attending. The election of officers resulted in the following selection: President, Burton S. Clark; vice-president, John Fellows, New Britain; secretary and treasurer, George W. Baker; board of governors, R. J. Ross, Burton S. Clark, John Fellows, George W. Baker, R. W. Pelton.

The meeting was called to order shortly after 6 o'clock, and

was in session until 7 o'clock, when the banquet was served. Retiring President R. J. Ross was the toastmaster, and Mr. Baker and Mr. Clark made short addresses. The principal speaker was Professor D. E. Cole, of the Westfield (Mass.) High School, who gave an illustrated lecture on "A Trip to Labrador."—*George W. Baker, '92, Secretary, Box 983, Hartford, Conn.*

TECHNOLOGY CLUB OF BOSTON.—The club has had a busy and successful winter season. A new steward was appointed early last summer and has made great improvements in the house service, especially in the dining room where the meals are excellent. The number of members coming for lunch at noon is the largest in the club's history. A larger number of members at breakfast and dinner would be very desirable. Nearly one hundred new members were admitted during the last three months of the year.

Five club evenings, including two "ladies' nights" have been held to date. The titles of these talks, all of which were illustrated will show their varied and interesting character: (1) Captain Robert Bartlett, "Seal Hunting on the Labrador Coast"; (2) Professor Louis Derr, "One Thousand Miles through Norway"; (3) Mr. W. Lyman Underwood, "A Trip across the Great Lakes"; (4) Professor Harrison W. Smith, "Travels among the Dyaks and Kayans of Sarawak, Borneo"; (5) Mr. J. K. M. L. Farquhar on "Gardens, Fields and Woods of Japan."

New members will be very welcome and a still greater use of the club's facilities by the present members will help to keep up the present standard.—*Robert S. Williams, '02, Secretary, 83 Newbury Street, Boston, Mass.*

WASHINGTON SOCIETY OF THE M. I. T.—The regular annual meeting of the society was called for the first Monday in December, but was adjourned over until January 20 because of the very small attendance. As the 20th was the date set for the annual banquet it was hoped that a better attendance would lead to a more satisfactory election of officers.

The meeting was held in the alumni room of the University Club on January 20. It was called to order by the retiring president, W. J. Gill, '04. The only business transacted was the election of officers; the new officers being:—F. W. Swanton, '90, president; W. H. Bixby, '67, vice-president; F. E. Fowle, Jr. '94,

treasurer; M. B. Landers, '05, secretary. These officers, together with Parker Dodge, '07, form the executive committee. The meeting then adjourned to the dining room of the club where the annual dinner was served. Gill, '04, presided, and the speakers of the evening were: Mr. Jasper Whiting, '89, who told us in considerable detail of the plans for the New Technology; also of the New York reunion; Mr. Ralph P. Barnard, of the University Club, who told us of the organization of the club, largely through the efforts of the local society; and General Bixby, who related some anecdotes of the early history of the Institute.

Mr. Marshall O. Leighton, '96, was included in the list of speakers, but unfortunately was kept away by illness.

The committee in charge of the banquet, which consisted of Sutton, '08, chairman, Davis, '09, and Swanton, '90, are entitled to the greatest credit for the manner in which the banquet was handled. The menu was good and the dinner was well served, and we have never had better speakers. The committee, however, made one serious mistake, and that was in assuming that with a membership of nearly 270, they could count on an attendance of at least thirty. It is doubly disappointing to men who have done careful work, and who have made really successful arrangements, to have the whole spoiled by the small attendance which characterized this dinner. It is very surprising that what is said to be the third largest of our alumni associations cannot secure even a fair attendance at a dinner which in every other feature was a success.

The new officers have not made any plans for the coming year, but will endeavor to infuse a little life into the membership. If we only had a few such members as are found in the local societies in the West with apparently small but loyal memberships there is no question that the association could take the rank that its numbers warrant.

All future communications to the society should be addressed to—*M. B. Landers, '05, Secretary, 1489 Newton Street, N. W. Washington, D. C.*

THE TECHNOLOGY ASSOCIATION OF NEW HAMPSHIRE.—The Technology Association of New Hampshire again established the fact that it is a live element at its second annual meeting held February 21, at the Eagle Hotel, Concord, N. H., where a strong enthusiastic bunch of boys made a noise like a Tech riot.

The old state of New Hampshire at least instills into one the element of enthusiasm and the boys who attend our meetings go home with a feeling of having had the best time ever and as a result, bring new members to the following meeting for inoculation with the spirit that stiffens the vertebra. We are growing fast here, but there are still some stragglers who need to have their cosmic ego dynamited and this year we intend to have them join our association or force them to leave the state. When we have President Fay of the Alumni Council come to talk to us on the new Tech, to tell us of the \$6,250,000 that is to be put into new buildings, equipment, etc., at the new home of Tech, the fellow who stays at home misses the time of his life to throw out his chest and contemplate the fact that Technology is now on the map to stay and that some institutions which were once rivals have been left at the post. To remember that this money has been raised in three years entirely through the enthusiastic organized efforts of Tech men directed by President Maclaurin, whose optimism and determination has made it all possible, cannot fail to make every Tech man have a higher regard for himself and his fellow alumni. And this is the sort of spirit that the work of the Alumni Council is engendering in the Tech men who have the opportunity at the various Tech meetings to hear such men as President Fay. It is a fact that heretofore Tech graduates have forgotten their Alma Mater soon after graduation in the rush to get established and in satisfying their desire for money and have failed to realize that after all they, at least, owe Tech something more than building up for it a reputation for turning out money grubbers. We are now establishing a fact that Tech men are good fellows, full of good cheer, animation, hope, ambition and courage. And this was the character of the thirty men who gathered at Concord to listen to President Fay, '93, of the Alumni Council; Mr. Fry, '85, general manager of the Sullivan Machinery Company and Maurice Bullard, '08, superintendent of power of the McElwain Shoe Company.

In addition to the question of funds for the new Tech, Mr. Fay spoke at length on the finances of the Alumni Association, the increase of its membership by 640 in the past year; on the promotion of social relations between the various Technology clubs through the country and the formation of a federation of them; on the proposed trip of President Maclaurin to the

West to stimulate interest there in Tech; on the Alumni Council's increased influence in the administration of affairs; on the proposed meeting to be held in Chicago next year by the Tech Clubs Associated; on the question of holding the next alumni reunion at Boston in 1915, instead of 1914; on the feasibility of issuing a business directory of Tech men so that Tech men in executive positions could secure expert advice and purchase supplies from other Tech men who had those commodities to offer, and lastly on the question of keeping Tech men in the public eye through the newspapers in all parts of the country.

Mr. T. W. Fry, '85, who is in charge of the Alumni Fund work for New Hampshire spoke at length on the need of every Tech man contributing some amount to the fund and told to what uses this fund was to be spent. Maurice Bullard, '08, a member of the School Board of Manchester and a rising politician, spoke of the need of vocational education in Manchester. Ex-secretary Andrew Fisher, Jr., '05, spoke of the success of the midsummer outing held at Three Rivers Farm, Dover, N. H., and expatiated on the full sideboard, the elaborate clam-bake, the attractive waitresses and the pleasing entertainment which was furnished by our host, Mr. E. W. Rollins, '71, whose guests we were on that day. After Mr. Fisher's speech a rising vote of thanks was given Mr. Rollins to show our gratitude for his kindness in thus entertaining us. Due to a severe cold Mr. Rollins begged to be excused from speaking, much to the disappointment of the men present who feel that to Mr. Rollins is due to a great measure, the success of this club. Through President Arnott, however, Mr. Rollins extended to the club an invitation to hold our next midsummer outing at his farm and to be his guests on that day.

At the business meeting the following officers were elected for the coming year:—President, James L. Arnott, '75; vice-president, Norwin S. Bean, '94; secretary and treasurer, Walter D. Davol, '06; and as representative on the Alumni Council, Andrew Fisher, Jr., '05.

The following men were present at this meeting: James L. Arnott, '74, George M. Belcher, '08, George A. Brown, '11, Maurice L. Bullard, '08, John C. Chase, '74, R. C. Collins, '08, W. D. Davol, '06, Frederic H. Fay, '93, Andrew Fisher, Jr., '05, S. S. Flanders, '74, T. W. Fry, '85, C. F. Gardner, '03, K. W. Gasche, '12, A. P. Gerry, '05, Carl A. Hall, '08, Leigh S. Hall, '14, B. P.

Jenks, '92, George P. Lauder, '89, R. V. Reed, '06, R. I. Ripley, '08, D. G. Robbins, '07, William K. Robbins, A. O. Roberts, '04, E. W. Rollins, '71, Miles Sampson, '08, H. R. Sawyer, '99, H. A. Smith, '10, Omar S. Swenson, '04, Herman E. Thompson, '04, J. A. Urquhart, '11.—*Walter D. Davol, '06, Secretary and Treasurer, Box 494, Manchester, N. H.*

THE TECHNOLOGY CLUB OF THE CONNECTICUT VALLEY.—The Technology Club of the Connecticut Valley is planning to hold its annual frolic at the Hartford Yacht Club at Saybrook, on June 20 and 21. All the regular members are expecting to be present, except the secretary. He is leaving the country in order to avoid the necessity of being present. He has not missed a meeting for five years and knows that if he were in Connecticut, nothing could keep him from being at Saybrook on June 21. The regular members go down on the Hartford boat Friday evening, leaving Hartford at five o'clock. It is a beautiful trip down and many strange adventures have been encountered on the way. One year, one of our members was summoned back by telephone when the boat stopped at Middletown, but was rescued by the rest of the party and carried on in triumph to Saybrook.

This year the meeting will be in charge of George W. Baker, '92, whom you all know, and Robert J. Ross, '06, whom you all ought to know. Address all communications about the meeting or applications for permission to attend, to P. O. Box 983, Hartford, Conn. Remember that June 21 is Tech day at the Hartford Yacht Club at Saybrook and Tech men will be welcome.—*E. W. Pelton, '03, Secretary, 77 Forest Street, New Britain, Conn.*

TECHNOLOGY CLUB OF NORTHERN OHIO.—“Annual Dinners,” defined the Gink who had looked the Matter up, “are noted Chiefly for their great Variety of Food and Drink. They are Common in all Large Centers of Population.”

It has never been made Clear why the Gink failed to observe that they also took a lot of Coin unless one had a Pass like those issued to the Principal Speakers.

It was I. S. Cobb, I believe, who said that if travel Broadened a man it also Flattened him.

The same Thing applies to Annual Dinners, but it is never used

as a Bluff by the Married Men to stay home at the risk of missing a Big Time with the Boys.

They are always there with Both Feet which shows that the Gink had been given a Bum Steer.

A bunch of the Alumni playing in the Technology Club of Northern Ohio as presented by F. A. Smythe, '89, put on their Annual the night of March First.

It was a Real Performance at the Swellest Place in Town, with One Hundred in the cast counting Supes.

The Main Bill called for the Curtain at six-thirty but an Hour passed before all were lined up at the Festive Board within Reaching Distance of their Martini.

S. Y. Ball, '03, set up a Box Office near the Door and further held up the Game.

He dispensed Meal Tickets at a Nominal Charge and soaked those in Arrears with an extra Simolean for Dues.

Dues are the same as an Ante, only bigger, and help the Box Office to come out even.

Each Meal Ticket consisted of a Card for identification, surrounded by a miniature Pneumatic Tire and fitted with a small Strap for one's Ingersoll.

Many took them Home, however, because of their Adaptability as Teething Rings.

Some of the Worthy Members tried to Dodge the Box Office by going through the Grill Room and up the Back Way and might have succeeded but for a Bar which stopped further Progress.

'98 voted this the Proper Moment to get a good Start and elected Strickland as Starter, after which they adjourned to mingle with the Crowd around the Box Office and aid in extending the Glad Hand to Mayor Baker.

The curtain was rung up by Smythe ordering a Toast to the New Technology; V. I. Lansing, '98, who was Chief Barker for the Occasion following up with a loud M. I. T. aided by All Present.

At the High Sign from the Grandstand, all sat down to enjoy the Feed. A Feature of the Lay Out was a neatly engraved Chart which showed one just how he'd Stack Up as the evening Slipped By.

When it comes to a Jagged Line on a piece of Plotting Paper, D. R. Stevens, '11, has R. Babson Lashed to the Mast.

Along about "Bardwell Bleached Celery," the Bunch from

Akron began to get Uneasy and to quiet their Nerves rung in some New Stuff which drew a Hand and made a Hit with the Musicians—

Gutta Percha—Fine Para
Q. D. Safety—Non Skid, Rah
No-Rim-Cut
Akron

This was a signal for the Shining Lights of '98 to try their Luck and start the old Gag of Roll Call by class so that everybody could stretch before the Meat Inning.

The Call went to '13 to give Mayor Baker a Chance.

Some friend of Dean Burton's, from East Machias, no doubt, Blew in a little later and Beefed about Old Times, much to the Amusement of those who were Wise, although Glover insisted he had nothing to do with Inciting the Drool about "The Chromo on the Bar Room Floor."

A space in the Grandstand had been Reserved for President Maclaurin. He was unable to Show Up but sent a Canned Message on a Dictophone Record as the next Best Thing. The attempt was a Success and the President's earnest appeal to aid Technology's growing needs should induce some of the old Fogies to Shell Out.

Smythe, by reference to the Chart, was due to Put Over a Good One—which he did—and added a few Fitting Remarks of his own before introducing the Mayor.

Baker is Hot Stuff when it comes to Handing Out the Bunk. He would have made a fine Engineer—from Arlo's viewpoint anyway—and sized up the Situation with a Fine appreciation of the Engineer's mission lassoing Nature's Forces for the welfare of Mankind.

Dean Burton was There with all the Dope as Usual. He didn't have to Worry about F. Rand, Esq., hanging anything on him in the Way of Bum Stories. It was Clear Sailing from Start to Finish.

His appeal was to the Alumni for their Undivided Support of a Fund to erect and maintain the Walker Memorial and other buildings of the group in Proper Style. It's only a question of a Couple of Million or so which wouldn't be a Hard Job if the Dean could get to all the Dubs who haven't Signed up with the Spiel he Passed to us.

F. A. Sieberling, President of the Goodyear Tire & Rubber Co. of Akron, as well as his Chief Gaffer, P. W. Litchfield, '96, were assisting the State Commission in putting the Kibosh on the recent Walk-Out because it interfered with Business. Hence Sherman spoke on behalf of the Akron Contingency.

H. A. Rapelye, '08, of the Pittsburgh Association came in for a word or two, and a Challenge to Northern Ohio for a Field Meet along in May.

The chances looked good for a little Easy Money and the Bluff was called on the Spot.

Nearly eleven-thirty.

Akron and Lakewood residents were getting Restless and anxious to hit the Husks at a Reasonable Hour while the Married Men were due to wreck the Chart if they failed to Mosey along as Slated.

Bill Jenkins, '09, helped us safely through the Difficult Chords of the Stein Song and with a last "We are Happy," everyone agreed the Party was a Pippin and that old Alma Mater was some Institution to tie to.

Moral: Be a Tech Man—

Kenneth Greenleaf, '11 (with apologies to George Ade).—*Sidney Young Ball, '03, Secretary, 1847 East 97th Street, Cleveland, Ohio.*

TECHNOLOGY CLUB OF ALBANY, N. Y.—The annual dinner of the Technology Club of Albany was held Saturday evening, March 15, 1913, at Keeler's Hotel, Albany, N. Y. The following men attended:

Biggi, Brainerd, Draper, Edge, Hawkins, Holmquist, Horton, E. E. Kimball, Kimball, Lugee, McKim, Morash, Northrup, Palmer, Robinson, Sage, Sargent, Suter, True, Wight and Withead.

The election of officers for the ensuing year was held. Dr. W. R. Whitney was elected president, John D. Moore, vice president, and R. C. Robinson, secretary-treasurer.

After a social hour, which included remarks regarding the recent alumni gathering at New York, all adjourned to enjoy the hotel's cabaret entertainment.—*R. C. Robinson, '01, Secretary, Research Laboratory, General Electric Company, Schenectady, N. Y.*

PITTSBURGH ALUMNI ASSOCIATION.—The Pittsburgh association, following their usual custom, held an annual banquet on Saturday evening, March 15, at the University Club. There were fifty-five members of the association present, a fair average number for this district. Twenty-seven expressed regret that absence from the city made it impossible for them to attend. We were particularly fortunate in having as our speakers, Mr. Robert Garland, a member of the council of nine men now controlling the destinies of Pittsburgh, and the well-beloved bursar, now assistant treasurer of the Institute, Mr. Frank H. Rand. The reason for the enthusiasm on the part of the younger men who had known him in Boston when it was announced that Mr. Rand was coming on, was very apparent to the older graduates as soon as they had the pleasure of meeting him on this occasion. He gave us a most interesting talk on general progress in Boston, enlightening us particularly on the growth of the Institute's financial resources and mingling with the statistics several of his incomparable stories. The several members of the association whom the secretary has seen since the dinner, were unanimous in their expressions of pleasure at having Mr. Rand with us and hearing his remarks. The Technology Association of Northern Ohio was represented by George T. Glover, '08, from Cleveland, and R. W. Ferris, '08, from Akron. There were also present from Boston, Mr. G. U. G. Holman, '89, and B. W. Dow, '09.

Among the propositions which are now receiving considerable thought from the Pittsburgh and Northern Ohio Associations, is that for a joint meeting to be held early in the summer at some point about half way between Cleveland and Pittsburgh. It is felt by many that such a meeting would be not only very enjoyable to all participating, but would have considerable value in drawing together Technology men who have unity of interest in other ways.

The association also was addressed by the former president, Fred Crabtree, '08, the incoming president, Morris Knowles, '91, who acted as toastmaster, Mr. Glover of the Northern Ohio Association, and Sumner B. Ely, '92, our representative to the Alumni Council. The newly elected officers of the association are, President, Morris Knowles; vice-president, W. E. Mott, '89; representative on the Alumni Council, Sumner B. Ely, '92; secretary-treasurer, Harry A. Rapelye, '08; the executive committee, in addition to the officers: L. K. Yoder, '95, W. F. Davidson, '01 and C. W. Davis, '98.

TECH MEN IN THE PUBLIC EYE

GEORGE F. SWAIN, '77, professor of civil engineering at Harvard University, was elected to the office of president of the American Society of Civil Engineers at its annual meeting. Professor Swain is an engineer of large practical experience, and has been a member of the Boston Transit Commission since it was first authorized in 1894, besides having been consulting engineer for the Railroad Commission for twenty-five years. He has been an expert in many court cases and a member of many grade-crossing commissions. He has also been a member of professional commissions and consulting engineer on matter in various states, and was a member of the National Conservation Congress which made an extended report to Congress some years ago. He represented Massachusetts and the Boston Chamber of Commerce at Congressional hearings in behalf of the Week's forest reservation bill. During recent years he has done much work in the way of appraising the value of railroad properties. He is the author of many professional papers and reports in engineering periodicals and elsewhere. He was head of the department of civil engineering at the Institute from 1881 to 1909.

FRANKLIN W. HOBBS, '89, treasurer of the Arlington Mills, was made president of that organization on the retirement of Mr. William Whitman in February. Mr. Hobbs has been connected with the corporation for twenty-two years, having served as treasurer for the past eleven years. He was president of the National Association of Cotton Manufacturers 1910-12, is a member of the executive committee of the National Association of Wool Growers, a director of the New England Trust Company of Boston and is associated with many other business organizations. Mr. Hobbs has been actively connected with the Alumni Association of Technology having served as its vice-president.

JOHN H. O'NEILL, '10, formerly with the American Museum of Natural History of New York City and also connected with the New York State Board of Health, was recently elected sanitary

engineer of the Louisiana State Board of Health. Mr. O'Neill will make his headquarters in New Orleans.

FREDERICK W. WOOD, '77, was recently elected a trustee of the Johns Hopkins University, Baltimore, Md. Mr. Wood is one of the best known steel manufacturers in the United States being president of the Maryland Steel Company at Sparrows Point, Md. Mr. Wood entered the service of the Pennsylvania Steel Company soon after his graduation from the Institute and became superintendent of blast furnaces in 1880. He continued to advance until the organization of the Maryland Steel Company when he was elected its president. He is vice-president of the Pennsylvania Steel Company of New Jersey, a director of the Spanish-American Iron Company, the Savings Bank of Baltimore, the Consolidated Gas, Electric Light & Power Company, of Baltimore, member of the board of managers of the Maryland Institute and of the board of visitors of the Polytechnic Institute of Baltimore. Mr. Wood has served as a term member of the Corporation of the Institute of Technology, representing the alumni.

FREDERIC H. FAY, '93, was elected president of the Boston Society of Civil Engineers on March 19, 1913, having previously served two years as vice-president and over two years as a director of the society. This organization bears the distinction of being the oldest engineering society on the American continent, it having been organized in 1848. Its membership is not confined to Boston or to New England but extends all over the United States as well as to Canada, Central and South America, the American insular possessions and even South Africa; and among its 823 members are represented all branches of the engineering profession.

GEORGE J. BALDWIN, '77, was recently made a member of the board of trustees of the Georgia School of Technology. Mr. Baldwin is president of the Savannah Electric Company, Jacksonville Traction Company, Tampa Electric Company, Key West Electric Company, Pensacola Electric Company and also of a short line steam railway in northern Georgia. He is a director in various banks and trust companies as well as in transportation and manufacturing enterprises. Mr. Baldwin is also vice-presi-

dent of the Georgia Historical Society, president of the Kate Baldwin Kindergarten Association and the Associated Charities of Savannah. He is a trustee of the Georgia infirmary and of Chatham Academy, Savannah.

MYRON L. FULLER, '96, formerly chief of Eastern section, division of hydrology, United States Geological Survey, has recently been retained through John R. Freeman, '76, consulting engineer on the \$40,000,000 Hetch Hetchy water project for San Francisco, as expert to investigate the quantity of which there has been much dispute. Mr. Fuller's findings were presented at the hearing before the Secretary of the Interior on the application of San Francisco to divert certain waters in the Yosemite National Park.

HENRY L. JACKSON, '05, who has been in charge of the food laboratories at the Kansas University, Lawrence, Kansas, has been made state chemist of Idaho to be located at Boise City. He will have a splendidly equipped new laboratory recently completed by the State Board of Health.

EDWARD JOHNSON, '99, has been appointed by the mayor and City Council of Los Angeles to succeed Lieut.-Gen. Adna R. Chaffee on the Board of Public Works, and head of the Los Angeles Aqueduct. Mr. Johnson collaborated with Edward S. Cobb in an engineering report on the aqueduct last summer.

SAMUEL C. STICKNEY, '86, has been appointed assistant to the president of the Erie Railroad with headquarters in New York City. Mr. Stickney began his railway experience as a rodman in Minnesota and then locating engineer in Iowa of the Chicago, St. Paul & Kansas City Railroad. He became superintendent of construction in 1887 and afterward was engineer of maintenance of way on the same road, which is now the Chicago Great Western. In 1890 he became chief engineer of the Chicago Union Transfer Railway. From 1892 to 1894 he was assistant to the president of the Chicago Great Western and the following five years, vice-president and general manager of the same road. In 1909 he entered the service of the Erie.

REPORT OF THE SECRETARY-TREASURER

The membership of the Alumni Association at the end of the year 1912 was 6,426 for whom we have addresses. (343 life members) 4,873 graduates and 1,553 elected members. From this membership dues for the past year were received from about 3,414 men, or 56 per cent. of the members. Last year the percentage was 55.

During the past year there have been twelve meetings of the executive committee and six meetings of the council. The average attendance at the council meetings was thirty-three.

The *Register of Former Students*, which the Alumni Association urged the Institute to publish, was issued last May. This book is a great improvement over the one first published three years ago, and contains a much larger number of addresses.

During the year there have been no changes in the by-laws or constitution. In the past year only six have made the payment of fifty dollars which exempts members from further payment of dues. The change in the by-laws of last year raised this payment from twenty-five to fifty dollars; this explains why relatively few have become life members, so called, during the past year.

Since January, 1912, three local associations have been formed, namely:—the Southwestern Technology Association in Kansas City, the Intermountain Association of Utah in Salt Lake City, and the Technology Club of the University of Illinois at Urbana.

During the past year, because its work has been completed, the committee in charge of planning a camp for the summer school has been discharged. It was with great satisfaction that the council received the report of this committee and a description of the camp from Professor Spofford.

The new committees of the year that have been appointed are the ones to consider recommendations for a course in business engineering for the Institute and the one on student housing.

A committee to increase the membership of the association, and also to secure a larger payment of dues, was appointed and they have worked actively during the year.

An Advisory Council for *The Tech*, the student daily publication

at the Institute, was appointed at the suggestion of the student Institute Committee.

The Runkle Memorial Committee, which was appointed some time previously, renewed its work and made a report with certain recommendations to the council on May 20.

The usual Pop concert was held, and this year without a financial loss. A pageant was presented to assist the Alumni Fund Committee in its work.

An emblem that can be worn by the alumni and by which one may recognize another as a Tech man was adopted at the suggestion of Major Cole, professor of military science at the Institute. About 1,500 of these Technology buttons have been distributed.

It has been the policy of the executive committee to have at council meetings guests who can instruct the members in interests of the Institute. Professors Taylor and Lindgren have met the council, also Professor Dewey, chairman of the Faculty; and it is the policy to continue inviting such guests.

Another event of the year was the acceptance of an invitation from the Technology Club of New York City to hold the annual banquet in New York instead of Boston; and also the presentation to your executive committee of a proposed draft for a constitution to form a federation of Technology clubs to be known as the Technology Clubs Associated. After deliberate consideration by the committee and consultation with the committee appointed by the alumni of New York, a form was found acceptable to both. This constitution was presented at the reunion held in New York on January 17 and 18.

The nominating committee met and prepared a slate for the officers of the association and six names to be acted on by the association for the nomination of three term members on the Corporation of the Institute. The officers were elected as nominated by the committee and Messrs. Cass Gilbert, '82, Charles Hayden, '90, and Charles T. Main, '76, were nominated by the association for term membership on the Corporation.

Herewith is presented the financial report of the association.

WALTER HUMPHREYS,
Secretary-Treasurer.

FINANCIAL STATEMENT

Cash Receipts, 1912

Cash on hand January 1, 1912,		\$258.94
Dues,	\$3,053.00	
Dues in advance,	306.00	
Gifts,	28.00	
Labor, postage and supplies,	7,851.67	
Life Membership,	240.00	
Pop Concert,	1,530.77	
Tech Buttons,	137.43	
Permanent Funds Committee,	2,685.27	
Annual Banquet,	541.00	
Interest,	22.01	
Council Dinners,	109.00	
REVIEW,		
Subscriptions,	3,004.94	
Subscriptions in advance,	296.00	
Advertising,	2,129.82	
	<hr/>	21,934.91
		<hr/>
		\$22,193.85

Cash Disbursements, 1912

Administration,	\$1,515.00
Administration for 1911,	83.33
Labor,	3,574.49
Postage,	2,014.23
Printing,	1,144.89
Life Membership,	288.00
Pop Concert,	1,530.77
Tech Buttons (on hand Jan. 1, 1913-30),	139.10
Banquet 1912,	1,003.75
Banquet 1913,	210.00
Collection Expense,	15.93
Council Dinners,	142.30
Permanent Funds Committee,	2,685.27
Refund by overpayment,	250.00
Stationery and Supplies,	661.50
Furniture and Fixtures,	160.50
Telephone and Telegraph,	18.00
Carfare, Express and Messenger,	45.00
REVIEW,	
Administration,	1,000.00
Administration for 1911,	83.34

Report of the Secretary-Treasurer

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Printing and Illustration,	\$2,355.00	
Postage, Binding and Mailing,	883.68	
Labor (A. A. Office),	631.51	
Paper,	1,307.53	
Telephone and Telegraph,	41.00	
Supplies,	20.00	
Carfare, Express and Messenger,	43.00	
Miscellaneous Expenses,	147.01	
		<hr/>
		21,964.13

Balance on hand January 1, 1913,	\$229.72
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<i>Resources</i>		<i>Liabilities</i>	
Cash on hand Dec. 31, 1912,	\$229.72	Thomas Todd Co.,	\$128.30
Life Membership,	44.00	M. H. Sawyer,	40.79
Labor and Supplies,	634.52	Samuel Ward Co.,	2.35
Tech Buttons,	1.50	G. H. Ellis Co.,	226.60
Advertisers,	409.43	Dix and Comer,	3.75
		Twin Elm Spring Co.,	.25
		E. A. Joyce,	15.90
		University Press,	40.00
		Vose-Swain Eng. Co.,	9.75
		S. D. Warren,	88.20
		Rumford Printing Co.,	800.80
		J. Andrews & Son,	14.50
		Cook Vivian Co.,	30.80
		Suffolk Engr. Co.,	28.85
			<hr/>
	<hr/>		\$1,430.84
	\$1,319.17		

<i>Payments in Advance</i>			
Annual Banquet 1913:		Dues,	\$307.00
Postage,	\$210.00	Subscription,	322.77
			<hr/>
			629.77
	<hr/>		
	\$1,529.17		
Deficit 1911,	334.70		
1912,	196.74		
	<hr/>		
	\$2,060.61		<hr/>
			\$2,060.61

MISCELLANEOUS CLIPPINGS

The question may very well be raised by those out of New York and not themselves architects as to who Mr. Bosworth, the man who is to design the New Technology, may be. A similar question might have been asked about four years ago when **Who is Bosworth?** Maclaurin was picked to preside over that institution. The Institute has the knack of spotting coming men, and Bosworth is described as emphatically the coming man in architecture. His shadow is already large across the threshold. He has been tried out in that most exacting school, the domestic architecture of wealthy men, and found so strong that in his hands was placed the great six-million dollar structure of the Western Union Company in New York, a thirty-story building which has impressed those who have viewed the plans and the model as remarkable in its class.

Mr. Bosworth, a graduate of Technology, has had training that fits him especially for the important work of the New Technology. Here it will be remembered there is not only the erection of the buildings to be considered, but the treatment of a water front almost unequaled in this country and the creation of a campus. A student and fellow-worker with the Olmsted, Bostonians will at once be assured of his qualities in this particular. One exposition of this was with Mr. Olmsted in the work for Leland Stanford University. A more recent example has been in the Pocantico Hill gardens of Mr. Rockefeller, the extraordinary beauty of which is recognized by all who have seen them.

When it comes to the handling of structures within an area of great extent, Mr. Bosworth is peculiarly well fitted, for in his early professional life he was connected with the architects of the Pan-American Exposition, was resident architect and designed a considerable number of the structures himself. In further exemplification of this kind of work, there is the Letchmere Village, N. Y., a state institution, which includes now about eighty-five buildings of varied character, from the impressive administration group to utilitarian industrial buildings and power plant, the treatment of which is admirable both from the practical and æsthetic points of view. The culmination of the practical comes at the moment in the Western Union structure now ready for its outer dress of white granite.

The eminence that Mr. Bosworth has attained in the eyes of his professional brethren is based on a study of art and architecture by no means common. He drew from his master, Alma Tadema, the highest appre-

ciation of beauty and architectural form, and supplemented this by long study of the Greek methods. In Paris in the ateliers of Freynet, Redon and Chaussemiche, architects of the Louvre and the palaces of Versailles and Trianon, he gained a knowledge of living French methods, and added to this studies in the countries of architectural richness, Rome and Italy, Holland, France and Spain.

This is the equipment of the architect of Technology which, in the words of an authority, "is utilizing its own best output for its own needs." Originality, good taste, sense and a marked classic simplicity are the characteristics that have impressed themselves on his critical clients. Despite the fact that he has completed no Singer or Woolworth skyscraper to focus the attention of the public, his work has been most important in other fields, and there is no question about his place. It is an important and responsible position that Technology occupies today, for in its hands is the making or the marring of the strategic point in the Charles River Basin. The Institute has gone deliberately to work, it has discussed and sifted carefully, and the citizens may rest assured that in its chosen architect there are really lodged the trinity of qualities necessary, skill in laying out of landscape, familiarity with large construction, and the artistic spirit of simplicity and grandeur.—*Boston Transcript*.

The Institute of Technology is to be congratulated on being the first institution of learning in this country to establish a course of lectures upon aëronautics. It is the first practical evidence that educational leaders have given of their faith in the permanency of this new art. Only a few years ago, less than ten, such an innovation would have drenched this entire community with ridicule. To what extremes we are to be led as flying becomes less dangerous the imagination cannot be trusted to predict, but we may be sure that we shall be continually startled by aërial feats and convinced of the practical value of the aëroplane as one of the tools of mankind.

The lectures at the Institute are to be given by Mr. Albert Adams Merrill of Wellesley, who has a practical knowledge of flying, having been taught at the Wright school, and is as well informed upon the scientific side of aëronautics as any one in this country. Mr. Merrill's connection with the art dates back to the organization of the Boston Aëronautical Society in 1895, of which he has always been the secretary.

Granting as we must, that even now the aëroplane is practical for certain purposes, as in war, and will certainly be made more practical, Mr. Merrill's lectures cannot fail to be of value in giving the young engineers that thorough knowledge of aërodynamics which necessarily precedes any real progress in the art.—*Boston Herald*.

It is neither as instructor in German nor as an inveterate punster that Joseph Blachstein of the Institute of Technology has acquired his "Blachy" great popularity among so many Tech men past and present.

That he imparts knowledge of German in a superior way, none who has ever studied under him can forget for a moment, and it is probably admitted that he has no equal at Technology as a punster. But his hold on his "young men"—and to him they are always his "young men," however gray and bald some of them have become—is his memory not merely for their faces and names, but for the details of their careers. Though he may not have met one of his former students in half a dozen years, he takes up at once the thread of the conversation where it was left off last. An old student who would not take the trouble to cross the street for a few moments' chat with "Blachy" is indifferent to his Tech training.—*Boston Journal*.

The reunion of alumni and friends of the Massachusetts Institute of Technology at New York was perhaps the most inspiring event for

The Tech Reunion

those participating and for the much larger circle in sympathy with them that has occurred in educational interests this season. It was a marked advance toward a nationalization of the institution, being the first time that a reunion of such magnitude and significance has been held away from Boston. It is the beginning of such reunions all over the country, and the plan of enlargement is likely to be so beneficial that the wonder is it has not been adopted before. Probably the next meeting ground will be Chicago, and from the Atlantic to the Pacific its gatherings henceforth are likely to focus public attention and interest.

This is a constructive age, and nowhere in the world have men been trained more broadly or more soundly to meet its requirements than at this institution of which the city and state are so justly proud. Wherever large things are doing in the material development of the country "Tech" men are to be found. They may linger in the cities if there is work for them to do; but we may be pretty sure that they will be found busy somewhere and that they rarely have reason to grumble because of lack of opportunity. Great enterprises are reaching out for them, in many instances even before they have received their diplomas and had the seal of efficiency put upon their labors.

The alumni are to a greater extent than those of some of the older institutions, comparatively young men, and they are inspired with admirable zeal and enthusiasm, love and loyalty for their alma mater. That has been demonstrated by the very large sum of money that represents the Alumni Fund, but does not include the munificent contributions made by individual graduates. They recognize the present as an

epochal period, and they are putting in time, money and effort to help it realize the potential benefits of its inviting opportunity. Tech was founded by a man of great vision, but even he builded better than he knew. He could hardly have foreseen, without special inspiration, the magnificent development in all parts of the country which the work that he inaugurated has so admirably supplemented. That development has needed men of profound attainments, and of such men "Tech" has been able to offer a generous supply.

Of course the men who gathered at New York to listen to the story of progress and prosperity took a very deep interest in the plans for the new "Tech" in a material sense. Mistakes at this parting of the ways would be deplorable, but it is the belief of those who listened to Mr. Freeman's program that there is small danger of mistakes of a vital character. Perhaps no man has ever had a more competent or critical audience than that to which he gave his report. And back of all these movements are the quiet but effective effort and influence of the new President.—*Boston Transcript*.

At the banquet of the Tech alumni in New York Saturday evening the committee builded better than they knew when they brought in a Highland piper to salute the head of the Institute. For not only is President Maclaurin a Scotsman, but President Humphreys of the Stevens Tech, a guest of honor, is from Edinburgh; Sir Ernest Shackleton, the Antarctic explorer, hails from Ireland, where the bagpipe is a national implement, and has been treasurer of the Scottish Geographical Society, while Professor Pupin of Columbia accepted the compliment to his native Serbia in which the piper is the national musician. It was Professor Pupin who, speaking after dinner, put his finger on a difficulty in American customs which is real. He humorously depicted the visit to his rooms of an individual with overcoat somewhat worn, who proved to be President Maclaurin. "It was a rainy day," said the distinguished Columbia physicist, "and the water stood in drops on the President's coat. I pitied him, I invited him to lunch with me—Columbia has a place where the professors may lunch for thirty cents—but Maclaurin intimated that he had an appointment with a millionaire." Pupin relates that he urged the President to go at once and without even shaking the water from his coat, for he thought the spectacle would touch even the hardened heart of a financier. "It is unfortunate," continued Professor Pupin, in more serious vein, "that the presidents of American colleges must first of all be beggars, and that nothing stirs them more than the word money. What is needed is a public appreciation of education, a national spirit that realizes what education is doing, so that the money will be offered, not solicited."—*Boston Transcript*.

By declaring that the new buildings for the Institute of Technology will not be designed without regard for beauty, President Maclaurin and Mr. John R. Freeman have allayed no little apprehension. For strange as it may seem, the assurance was needed. Although the Institute has taught young architects with uncommon thoroughness, it has not applied architecture to its own needs with much enthusiasm. It reared a hall beside the Rogers building, yet made no effort to match the two in dignity and grace. It chose details with no hint or echo of the sister building. That it chose a type of construction ill suited to the made ground of the Back Bay, it soon read in the cracks of the settling façade. It reared also on a side street a huge building, not too convenient within, while blank and featureless without. When the announcement came that the buildings on the Cambridge site were to be constructed of concrete, no wonder that many minds were chilled with a gray picture of educational shops and sheds. Foreboding was deepened by the outcome of the plans for the Brigham hospital—a painful proof that even unstinted resources and noted architects may not of themselves protect the community from ugliness. And so President Maclaurin and Mr. Freeman, by their reassuring words, have brought a general relief.

Of course no one wants the Institute to sacrifice utility to looks. But no friend of worthy architecture wants the Institute to plan for utility alone. These buildings are to dominate the farther bank of the whole Charles River Basin. They will enter the same view with the beautiful and costly Wheelwright bridge. They will flank the main highway into Cambridge; they will terminate the vistas of important Back Bay streets. The Institute, even with no thought of its debts to the public treasury, is under civic obligation to make the buildings, in both layout and detail, fair to look upon.

The buildings also are to shelter a school known throughout the world for its instructors' high standards and for its graduates' achievements. They can give such an institution no fit home unless they reveal the finest thought and skill of American architecture.—*Boston Herald*.

Five men from the Massachusetts Institute of Technology in five most prominent engineering positions in City Hall, Philadelphia, is the record that Mayor Rudolph Blankenburg has made in his effort to establish good government in this great city. It is a movement that will interest Bostonians on this account and for the further fact that men of Boston training are in other important municipal places in the same city. The record is one of which Mr. Blankenburg may well be proud, for it is evidence of the sincerity of the mayor in wishing to get at bottom facts in matters of the

Use and Beauty in New Tech

How Tech Runs Philadelphia

management of important bureaus, and incidentally testifies to the esteem in which the great Boston school is held in Pennsylvania.

TOWARD A REAL BUSINESS MANAGEMENT

It is further to be said that these men have been gathered as experts and some of them for times specifically stated, so that they are not to be regarded as importations to displace native talent, but avowedly for the purpose of reorganizing a group of services with regard to which truth compels the admission that they have not always been carried on with the best interests of the people in view. These Tech men are putting the bureaus on a commercial basis and establishing a standard whereby future performances may be measured. The result will be the giving to the great city offices a business management so nearly as such a thing is possible in view of municipal customs and precedent.

These five men, former students of Technology, are James Reed, '07, S. M., assistant naval constructor, U. S. N., now assistant director of Public Works; Carleton E. Davis, '93, chief of the Bureau of Water; Clayton W. Pike, '89, chief of Electrical Bureau; Hollis Godfrey, '98, Ph. B., Sc. D., F. R. G. S., chief of Gas Bureau, and Henry T. VanKeuren, '06, bridge engineer, Bureau of Highways. It is a further interesting fact that the combined salaries of these five men amount to twenty-eight thousand dollars, and a comparison of this figure with the added salaries of five heads of departments in Boston will serve for one indication of the responsibility of the places.

A GOOD FOUNDATION OF GOVERNMENT

Mayor Blankenburg is a strong figure in the troubled politics of Philadelphia. The city has been exploiting ground for politicians to a surprising extent. There is here an anomaly, for Philadelphia has apparently the most stable foundation for the best of government, for here there are at least a couple of hundred thousand homes owned by those who live in them. The whole policy of the citizens is to own a home and it is the ideal of the young man to secure a little house for himself and his bride, while the local associations makes the matter reasonably easy to the economical pair.

One would imagine that so large a number of voting house-owners would tend to greatest interest in the way in which the money collected by taxation is spent, but the contrary has been the case.

Mayor Blankenburg is certain that this is on account of indifference, and it is quite possible to rouse the better element and secure good government. This has been done in the past by one or two men. Councillor Uselma Smith, a decade ago, was elected year after year to the Council as

an Independent, and till his death, did excellent work in the interests of honesty. And now the thinking people have selected for mayor a man whose policy has been plain for years as in favor of good government. It is perhaps twenty-five years that Mr. Blankenburg has been in politics, and at different times he has been candidate for the office which he now holds, and he stands today as Philadelphia's business mayor.

MAYOR BLANKENBURG, PERSONALLY

The mayor is a delightful man to meet, he has the sympathy and support of the people, and is carrying on a campaign in local government in which efficiency is the watchword. In a brief interview he set forth his views that a city should be carried on in just the same way as a private business enterprise. He understands business and has been engaged successfully in affairs for more than thirty years. Accordingly he has asked various experts to tell him about the practical conditions attending the city work of Philadelphia. He is well satisfied with the showing and hopes to place his own city on a level in point of management with German and British municipalities.

A masterly stroke in the beginning was the selection of Morris Llewellyn Cooke for director of public works, the great office that includes most of the engineering bureaus. Mr. Cooke, who has his degree of M. E. from Lehigh University with supplementary training in the navy and with the Cramps, is well known to educators, for he it was who three years or so ago made the rating of educational institutions in point of efficiency that was the first of the series which now is so vigorously pursued. His work after leaving college has given him that faculty which is developed in army and navy men, the ability of seeing masses of men as units and units that can be focussed to a given end. This he needs in the control of his four thousand employees, and in them he has awakened loyalty and enthusiasm. He it is who is responsible in some measure for the selection of his bureau chiefs and these men are using every effort towards the accomplishment of a valid work of reformation.

THE CITY'S DEPARTMENTS

It should be explained here that besides such bodies as the Board of Education, city comptroller, law department and collector of taxes, there are five great departments in which are vested most of the activities of government. These are Public Safety—which includes both police and fire bureaus, with the electrical and the Bureau of Correction—Public Works, Public Health and Charities—including hospitals and registry of vital statistics—Supplies, and Wharves, Docks and Ferries. It should be further understood that the director of a department—usually with a

salary of \$10,000 a year—is required by law to have been a resident of the city for five years preceding his appointment, and to remain a resident during his term. With this in mind it will be seen that Mayor Blankenburg has given to his experts the highest places possible under the law.

The engineering bureaus naturally group themselves under public works, and they are the Bureau of Highways and Street Cleaning of which the bridges form a very important division, Lighting and Gas, Surveys, and Water, and here at the heads of the bureaus and of the bridge division are former students of Tech. The most important engineering bureau aside from these is that of Electricity which, from its close relation to causes of fires, is one of those under the Department of Public Safety.

THE MOST IMPORTANT JOB

The most important of the positions to which Mr. Blankenburg has asked a Tech man, Assistant Naval Constructor James Reed, U. S. N., is that of assistant director of public works. He is assistant to Mr. Cooke, the next man in importance, and to him has been given the enormous work that a department with four thousand employees and a budget of five millions must carry on. The scope of the department is exceedingly great, and things must be moved together to a single end. With his director Mr. Reed is in closest touch, and to him is left the carrying out of the important details which has eliminated politics from the department. His training has been a remarkable one, well fitting him for this kind of work. He came from the United States Naval Academy to Technology, finishing with the degree S. M., '07, and for practical shop training was in the navy yards at Boston and New York, with the Westinghouse and General Electric companies and in various steel mills in Pennsylvania. After experience with the North Atlantic Fleet he became in 1907 the special officer in charge of shops and power plant at the navy yard in Philadelphia; in 1910-11, inspector of hull material for the United States Navy, eastern district, and during 1911 was naval attaché of the United States Legations in Santiago, Buenos Ayres and Montevideo. On the request of the Philadelphia authorities he was given leave of absence in February, 1912, and after six months more in the City Hall he expects to return to his naval duties. He is one of the men whose work is intended to be fundamental and on which standards may be established to govern future proceedings in the department.

SAVING THE WATER

The next most important of these positions is that held by Carleton E. Davis, chief of the Bureau of Water. The revenues from this office are nearly five million dollars, these having been increased during the year

just ended by about two per cent. One of the results in economy has been the saving in wages for labor of about four per cent. over the figure of a year ago. A system of inspection has been installed whereby about four hundred thousand buildings were visited by men of the bureau, with the result of correcting leaky fixtures to the number of more than a quarter of a million. The saving by this procedure has been considerable. The introduction of meters, which conduces to truest economy, does not meet with much favor in Philadelphia, so that other means must be adopted to keep down the continually increasing consumption of water. This now reaches about 117,000,000,000 gallons per year, about two hundred gallons a day per citizen.

One piece of work that was done this year by Mr. Davis and his colleagues, the emergency handling of a great health problem, and one that has attracted a deal of attention, was the treatment of the second Roxburgh break. In November, 1911, the great water pipe broke, one that supplies a section of the city, the population of which is about 500,000. The drinking water and domestic supply of Philadelphia is pumped from the Schuylkill, a river that is polluted by sewage of up-stream localities. A system of filters installed during the last decade makes it suitable for city uses. The break, however, necessitated the furnishing of unfiltered river water to the citizens of the district. Although notice was given to the people not to use the water without boiling it, there was attributed to the unfiltered water of 1911 a considerable outbreak of typhoid fever, with about three hundred cases reported. Last October a similar break occurred in the same pipe not far from the same place, and it was again necessary to pump the unfiltered river water into the pipes.

STAVING OFF AN EPIDEMIC

With the new management there was team play and all the new resources of the department were utilized. An improvised hypochlorite purifying plant was almost instantly installed and the water treated with chemicals. The result is that not a single case of typhoid has been this time attributed to the temporary water supply. It is a splendid result to gain, toward which the technical men all helped, irrespective of the strict limits of their bureaus, and one which makes a record of honor and importance.

It may be interesting to note in passing what were the precautions adopted by this very much up-to-date board. The break occurred about midnight on October 26, 1912. Besides the emergency purifying plant, which was brought at once into action, there were distributed at daybreak of October 27, printed circulars warning the householders to boil the water, posters were already up in conspicuous places, on telegraph poles, and so soon as the stores were opened, displayed in their windows. The

local telephone companies notified all their subscribers, about thirteen thousand. Notice of the break with advice was given in the morning newspapers, special delivery letters were sent to the masters of all the schools and to all the ministers with requests for public announcement. All public fountains were cut off, along with public or semi-public water supplies. When the filtered water was again available the supply for a day or two was treated with hypochlorite, and all fire plugs and hydrants were flushed out with the idea of ridding the pipes of any possible noxious bacteria. It is an interesting fact that the bacterial count of the unfiltered Schuylkill River at the time of the break was from one to two hundred thousand per cubic centimeter.

Since leaving Tech Mr. Davis has been in excellent company in some exceedingly important work in water engineering. For a year and a half he was engaged in the high service at Manchester, N. H., and for four years in the water supply of New Bedford. For four years he was resident engineer for the Newark (N. J.) water, and for more than a year was engaged in water, sewage, pavements and municipal improvements along the line of the Panama Canal. He was for seven years assistant engineer with J. Waldo Smith, M. I. T., '87, in the tremendous engineering constructions that are to supply New York with water, there in charge of the reservoir department.

BRIGHTENING THE STREET LAMPS

Third in the group of Technology men under Director Cooke is Dr. Hollis Godfrey, who is the chief of Bureau of Gas. His position, like that of Mr. Reed, is frankly temporary, affording an opportunity for a rating in point of efficiency of the work of the bureau. His training with Taylor in scientific management stands him here in good stead, for there is included not only the care of fifty-odd thousand lamps scattered over 129 square miles of territory, but the complication of working with a gas company which has already made its terms with the city. One of the tasks successfully carried through by Dr. Godfrey is convincing the company that it is good business policy to exchange the old flat burners for mantel burners. This has been now accomplished in the twenty-four thousand gas street lamps. The illumination is increased by about one hundred per cent. A further discussion with the gas company permits the city to purchase gas over and above the stipulations of the contract, which will enable the city to replace gasoline-lighting by gas with distinct economy. The principle in Philadelphia today is to reduce the gasoline illumination to its lowest practicable limit.

Accurate tests have been employed for the rating of street lights, the first that the city has known. It was found that the candle-power of the

gasolene lamps was about twenty-five per cent. too low and the requirements of the specifications have been insisted on.

Dr. Godfrey is well known in Boston and vicinity, having been principal of the Needham High School, teacher of science in the East Boston High, and head of the science work in the School of Practical Arts. He is not new to Philadelphia, having already been in the employ of the city as consulting engineer in a study of the water system. Unless one is pretty familiar with the city it is difficult to realize how great has been the improvement here. Twenty years ago the water supplied to the houses was loaded with mechanical impurities, the culm of the coal mines, and it is literally true that it was so black that a cent placed in the hollow of the bottom of an ordinary glass could not be seen through the water unless with special attention. After much preliminary consultation, four enormous filtering plants have been installed, which can care for the enormous flow that the city now demands.

ONE MAN FOR \$21,000,000 WORTH OF BRIDGES

Although Mr. Van Keuren is not at the head of the Bureau of Highways, he is still the chief of an important division, Bridges and Sewers, the care and maintenance of no less than 285 bridges, with a value of something like \$21,000,000 coming under his supervision. The division is today removed from political influence; a choice was made of the best of the former employees, and shop methods have been introduced. Mr. Van Keuren is the most recent of the five Tech men to come into City Hall, so that figures of results are not yet available. The sewer portion of the division is devoted to the repairing of these useful waste conductors, not to their initial construction, and this demands ability in the handling of contractors and men. The previous experiences of this young man have been along these precise lines in Mexico and various cities of the West. He has had an army experience, has been in the Fore River Shops at Quincy; with the Detroit River Tunnel Company, the Canadian Bridge Company, at Walkerville, Ont., and with the Pennsy in Philadelphia.

The fifth member of this interesting Technology colony is Clayton W. Pike, B. S., who is chief of the electrical bureau. As has already been said, this is affiliated with the police and fire bureaus in the great Department of Public Safety. It includes in its scope all the electrical matters pertaining to the city functions, electric lighting, fire, and police signalling, and the telephone work, together with various minor duties like licensing the operators of passenger elevators.

Mr. Pike has in the past year been able to carry on his bureau with a force of 301, against 377 previously employed, and has effected a saving in expenditures of about four per cent., with a gain in efficiency of service equivalent to about ten per cent. of the total cost.

SAVING ALL ALONG THE LINE

Modern systems of accounting, purchasing and handling have been installed in the year. The municipal telephone system has been extended by adding eight branch exchanges. This is a large establishment, having more than fifteen hundred telephones, and while it has always been considered well managed Mr. Pike has introduced methods that now secure a reply in five seconds. This is work that is hard to match in all the telephone world.

The fire alarm system has been extended by fifty-four street boxes and improved by splitting circuits and getting the wires underground. The frequency of testing has been increased. The police patrol, which is quite the peer of that of any other city, has been improved by the establishment of one new station and a dozen street boxes. The latter are now of improved design, which makes less the danger to patrolmen in case the wires become crossed with high-tension circuits.

In the city power plant a rearrangement of the piping affording a chance to utilize the exhaust has resulted in the saving of 2,500 tons of coal.

One of the important pieces of work during the year was the remodelling of fourteen of the elevators in the City Hall, and so safeguarding them that for the first time they have been approved by the elevator inspection service. Plans have been made for five new electric passenger elevators and one sidewalk freight lift.

THE BEST-LIGHTED CITY

The arc-lighting of Philadelphia is an important matter wherein the city claims not only the greatest number of such lights—unless the recent contract in Chicago has been completed—but the highest quality. There are certain portions of the city that are excessively illuminated, but everywhere the arc-lights are excellent. Extensive tests have been made for the first time to determine the quality of performance of the lamps, and further there has been obtained a lowering of the contract price so that about 1,800 more lamps may be used by the city for the same sum.

The surveys by the bureau have included all the city's overhead constructions and about one quarter of those of the public service corporations. New regulations for size and methods of support of electric signs have been promulgated, new theatre and motion-picture show requirements have been established and the complete inspection of all such establishments has been made.

The man who has accomplished this great amount of work, getting greater efficiency and extensions of his systems with a smaller payroll, studied at Fryeburg (Me.) Academy before going to Tech. For a while he was instructor in electrical engineering at the University of Pennsyl-

vania, electrical engineer of the Merrimac Manufacturing Company, Lowell, and later organized a company of electrical contractors—Keller-Pike. He has been president of the electrical section of the good old Franklin Institute and of two other Philadelphia electrical associations and is director of the International Society of Municipal Engineers. He comes to the Philadelphia municipal work wonderfully well equipped.

Of the sixth man in Philadelphia public work who has been homed in Boston, just a word. Everybody in health or charity work in the city will remember Alexander M. Wilson. He was a member of the excursion committee of the Appalachian Mountain Club, absented himself for a while to teach Chicago some new ideas in health matters, and returned to Boston as secretary of the Association for the Relief and Control of Tuberculosis. He went later to important work in connection with the Phipps Institute and is today assistant director under Dr. Neff of the Department of Public Health and Charities, with a salary equal to that of any member of the Boston Board of Health, the chairman excepted. The ability of Mr. Wilson was recognized by those who met him in Boston and such friends will follow with greatest pleasure the story of his quick advancement in his profession.—*Boston Transcript*.

During the past week two important matters in aviation have been the subject of action by Congress, the first being the passage by the Senate of an appropriation of \$5,000 for the work of the **Research in Aeronautics** commission on a National Aërodynamical Laboratory named by the President, and the other the final acceptance by the House of the army bill with its niggardly sum of \$100,000 for army aëroplanes during the coming fiscal year.

The value of the work which is to be done by the commission will depend wholly, of course, on the weight which is attached to its report by Congress, and in the present temper of Congress little, indeed, is to be hoped for. As was mentioned in an article in the *Transcript* two weeks ago, there is today absolutely no equipment in the country which can perform the work necessarily preliminary to the construction of aëroplanes on scientific lines. The recommendations to be made by the commission can do no more than to emphasize this fact strongly, showing, furthermore, that today aërodynamical experiments cannot be omitted. Earlier methods of hit-or-miss machine building can no longer be used, and have, already, been discarded abroad.

As we have said, there seems to be but slight prospect of the establishment of a national laboratory by national funds at this time, and, under the circumstances, it is probable that the work might be better done by a private institution of the standing of the Massachusetts Institute of Technology. The Institute is ready to go ahead, and all that is lacking is the money for providing the proper adequate equipment.

President Maclaurin's service on the commission will undoubtedly aid greatly in the organization of a department of aërodynamics at Technology. He will be able to realize then, even more fully than is the case at present, the place which the study of the science of the properties of the air is to take in the future, and may secure for the institution under his control the honor of being the first to offer training for a great profession to come, that of the aëronautical engineer. Under these conditions Technology graduates of wealth, and others, too, will make no mistake in exercising the utmost liberality toward the proposed laboratory to be established here in Boston. They could do nothing which would more effectively stimulate the scientific development of aviation in America.—*Boston Transcript*.

BOOK REVIEWS

MICHIGAN BIRD LIFE. Special Bulletin of the Department of Zoölogy and Physiology of the Michigan Agricultural College. By Professor Walter Bradford Barrows, '76, Professor of Zoölogy and Physiology and Curator of the General Museum.

Its title gives no more than a hint of the fund of information and entertainment to be found in this substantial volume of 822 pages. Fortunately for all who are interested in birds—and who does not, in these days of out-of-doors life, take some interest in this most fascinating group of animals?—Michigan is so situated that of the birds inhabiting the United States east of the Rockies few fail at some time to enter the state. So this book, modestly entitled "Michigan Bird Life," is far from being of merely local interest, for it treats of the birds of a large portion of the United States.

The introduction is well designed to help the reader to appreciate and understand the parts which follow. It begins with an account of the bio-geography of the state, including topography, climate, distribution of plants, a discussion of Merriam's life zones as applied to Michigan, the distribution of birds in the different regions of the state, and the changes that have recently occurred. Then follow directions for the beginner in the study of birds and in the use of analytical keys, with which the book is abundantly supplied; and finally a very interesting section on migration, a phenomenon that appeals to one's imagination perhaps more than does any other feature of bird life.

The main part of the work consists of the Life Histories' of which there are 362. The order of arrangement and the names employed are those adopted in the third edition (1910) of the Check List of North American Birds of the American Ornithologists' Union. Under each order there is a key to the families and under each family a key to the species. Under each species we have first the vernacular and Latin names and the synonyms of both; then the salient characters by which the bird may be recognized and a statement of the geographical distribution of the species or sub-species, as the case may be. Then follows an account of the natural history of the bird, including records of its occurrence in Michigan, its nesting habits, food and migration, and, finally, in fine print is a technical description of the species or sub-species.

In two respects it would seem that these descriptions might have been improved without unduly increasing the size of the book. In the first place they have the defect, common to popular books on birds, of neglecting any mention of the characters by which the genera are distinguished. For one to whom all ducks are ducks, it would be interesting to know why the redhead and canvasback are called Marila, while the mallard and black duck are given the name of Anas. The generic name would certainly have more significance for beginners or amateurs if the distinguishing generic characters had been indicated, either by arranging them in analytical keys or by italicizing them in the technical descriptions.

The other defect is that no information is given as to why, in so many cases, the

Latin name consists of three words instead of the usual two. It would be interesting to know, for example, that our Eastern song sparrow, *Melospiza melodia melodia*, is but one branch of a species, *Melospiza melodia*, that is spread over the greater part of North America and has a very varied representation in the Rocky Mountain and Pacific Coast regions.

The accounts of the natural history of each species are extensive and full of interesting details. This applies to common birds as well as to less familiar and rare forms. For example, three and a half pages are devoted to the house wren, and over seven to the passenger pigeon. This last mentioned account is, perhaps, the most interesting one in the book for it describes one of the most dramatic tragedies in the animal kingdom, the sudden extermination of a species. Until 1870 these birds were so numerous as to be considered a pest. They gathered in flocks of incredible size, which occupied nesting sites many square miles in extent. During the following decade the capture and killing of these birds for market became a large business. In 1878 the shipments by rail alone from one nesting are estimated for the season to be 1,500,000 birds. The last nestings of importance in Michigan occurred in 1880 and 1881. Recently prizes have been offered for the discovery of living birds, but none has been found, and the passenger pigeon is probably an extinct species, unless there are still alive in the Cincinnati zoological garden two birds which, in 1909, were thirteen and twenty-four years old, respectively, too old to perpetuate their species.

Many birds are of economic value to the farmer, either helping or hindering his work. These cases are considered in connection with the feeding habits of the species, and are treated with judicial fairness from the point of view of the farmer as well as of the bird. The author takes every proper opportunity to condemn indiscriminate killing, and all naturalists will applaud his statement that all wild things of our country have a right to protection independent of their economic status. As he says,—"The fox, the crow, the kingfisher, the muskrat, may or may not, in the long run, be more beneficial than harmful, yet each, in its own way, has an aesthetic, a scientific, a human value, which cannot be estimated in dollars and cents and which should forever protect him from extreme persecution, and, above all, from final extinction."

The book closes with a bibliography, a glossary, and an index, and it is well illustrated by plates and text figures, many of which are original. Throughout, the book impresses one as the finished production of a thoroughly scientific and well-trained man. It is a credit to American science, to the author, and to his *alma mater*.

R. P. BIGELOW.

HOUSE SANITATION A MANUAL FOR HOUSEKEEPERS. By Marion Talbot, '88, Whitcomb & Marrous, Boston, Mass., 109 pages, price 75 cents.

This little book has been written to take the place of Mrs. Ellen H. Richards' book on Home Sanitation, which was published some twenty-five years ago and is now out of date. The present book, while entirely rewritten, contains all the useful matter of the older text and also the results of later experience and research in sanitary science, thus bringing it up to date. As the author says in her introduction, it is an endeavor to replace outworn theories and useless practices with such modern views and practical suggestions as will best help the professional housekeeper in her

effort to maintain her household in health and physical efficiency with the least expenditure of money, time, and strength. Some pages are given to a discussion of the new sanitation, showing how modern scientific research and the practice of hygiene has changed the early Christian beliefs that disease was caused by the wrath of God or the malice of Satan into a knowledge that health depends largely upon freedom from infection and good sanitary surroundings. The reader is shown why the housekeeper is responsible for the sanitary condition of her home, and a detailed account is given as to what the housewife should know in order to keep the inmates of her home in health. The dangerous qualities of an unsanitary house are pointed out and attention is called to the fact that women who are so often confined to the house by their work suffer most from unhygienic surroundings which slowly and insidiously undermine their health, producing languor and preventing sustained effort. The importance of selecting a healthful site for the home is emphasized and it is shown that while defective construction may generally be remedied, unhealthy surroundings, an undesirable aspect, or insalubrious building site cannot be changed. The chief essentials to be secured are pure air, sunshine and dryness, as these are conditions upon which physical and mental vigor largely depend and without them the human system loses its power of resistance to disease. A very good description of the plumbing system as installed in modern houses is given, together with suggestions for keeping it in condition. Air, ventilation and furnaces, light and lighting, together with practical suggestions in regard to furnishing are all touched upon. There are also special chapters on country houses and the methods used to control infection when a contagious disease attacks a member of the family. At the end of each chapter all the important points are summed up in the form of questions, which add greatly to the interest of the book and draw attention to the essential features.

THOMAS S. CARRINGTON in *American Journal of Public Health*.

DECENNIAL RECORD OF THE CLASS OF 1901. Massachusetts Institute of Technology; 161 pages; illustrated; paper covers.

The Decennial Record of the Class of 1901 is principally a compilation of short biographies of the various members of the class. It contains a group picture of the class at the 1909 reunion, the line-up of the class at Nantasket on that occasion; a picture of the class baby, now eleven years old, surrounded by photographs of the children of various members of the class, and a picture of the class stunt at Nantasket Beach in 1909. The book contains a series of reports of the secretary from December 14, 1901, to June 24, 1911. It also contains the class constitution.

SCIENTIFIC AUCTION BRIDGE. A clear exposition of the game to aid both the beginner and the experienced player, with explicit and easy rules for bidding and playing. By E. V. Shepard, '89, Harper & Brothers, Publishers, New York and London. 1913.

Mr. Shepard's book on "Scientific Auction Bridge" is a clear and scientific exposition of the game and is of valuable aid both to the beginner and experienced player. It is clearly and handsomely printed and forms a very attractive book. Other writers teach by illustrative hands which one may never hold. He gives simple rules for bidding and playing any hand possible to deal.

NEWS FROM THE CLASSES

1868.

ROBERT H. RICHARDS, *Sec.*, Mass. Inst. of Tech., Boston, Mass.

The New York reunion which is now Tech history is a pleasant memory to those who were fortunate enough to be present, and those who were not there, have the secretary's sympathy as he much regretted his own inability to represent his class. Eben Stevens, Whitney Conant and William E. Hoyt were '68's quota, but word was received from many others expressing their regrets and good reasons for non-attendance. Among these were E. S. Safford, D. M. Wheeler, N. C. Stearns, '71, George T. Tilden, '69, and James P. Tolman. W. E. Stone wrote that although he would give "all his old boots" to go he found he would be in another part of the country at that date. He added that he expected to meet his class at the Pops next June, and also mentioned a change of address—50 Congress St.—Eli Forbes is spending the winter in Lancaster, Mass., and is planning a California trip for next winter.—Andrew H. Russell wrote from Plymouth, where it will be recalled he settled after his retirement from the army succeeded by a European trip.—E. C. Appleton tells of a busy life in the South, in a letter headed Southern Powers Company, Stony Point, N. C.—An extract from W. E. Hoyt's letter may be of interest:

Railroading is rather exacting in its requirements on those engaged in the work, and some of us find little leisure for social enjoyments, but the excitement and the fascination of our occupation compensate for many deprivations. You ask me about last summer. My little outing was at the seashore in the good old Pine Tree State where, once upon a time, you lived. Our cottage is not so far away, however, as your old home. It stands in a pine grove close to the ocean in Scarborough, and directly in front of it, within a stone's throw, is a beautiful sand beach as smooth as a floor, four hundred feet wide at low tide and more than three miles long and, on this the surf beats all day and all night, and here, at high tide or at low tide, we take our ocean baths, and out in the offing, away beyond the breakers, we sail or fish and so enjoy life to the utmost. There are two rivers close by, one of fresh water and the other salt, and there are broad marshes and fragrant meadows and high rocky ledges with tall pines at least a century old and, back in the upland, are prosperous looking farms with great white farm houses and big barns. With these pleasant surroundings, our small possessions are a source of great enjoyment to us, for my family is able, generally, to pass the summer there and to linger a while in the fall.

The secretary recently learned that two small boys whom he and some of his students of the mining department met on one of their western trips many years ago have since become graduates of Technology, all on account of the interest the young men of his party excited in these small friends of a few hours.

From the *Boston Herald* of January 25, we print the following item:

Boston society is interested in the wedding today in Washington of Robert Swain Peabody, Harvard '66, architect, of this city, to Miss Helen Lee, daughter of Mrs. Charles Carroll Lee of Washington. The engagement of Mr. Peabody and Miss Lee was announced to their friends about ten days ago. The wedding will take place in Mrs. Lee's home on Massachusetts Avenue, and will be attended by members of the two families only.

Mr. Peabody is a member of the American Institute of Architects and of the Boston Society of Architects. He is an overseer of Harvard College and a member of the Corporation of the Massachusetts Institute of Technology. He was appointed chairman of the Boston Park Commission by Mayor Hibbard in 1909.

1870.

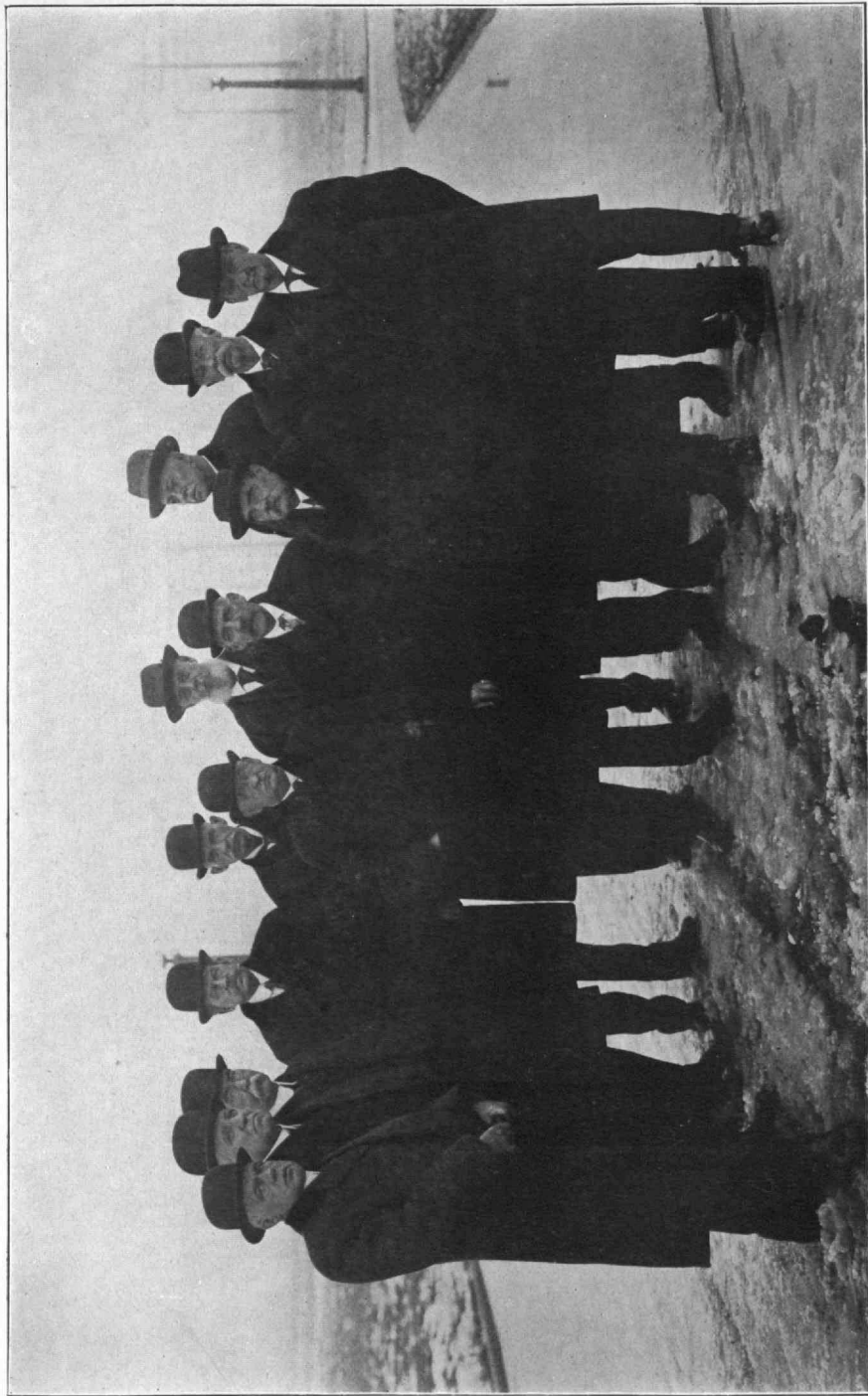
C. R. CROSS, *Sec.*, Mass. Inst. of Tech., Boston, Mass.

At the recent Technology class luncheon in New York there were present six members of the class of 1870: W. N. Bannard, E. D. Bolton, C. Orvis, F. R. Page, W. Whittlesey, and the secretary. Mr. Bolton had acted with great efficiency as the "class booster," writing a personal manuscript letter to every member of the class. Replies were received from Messrs. C. F. W. Archer, C. E. Avery, C. H. Breck, F. Brooks, W. Clark, W. C. Dickinson, C. W. Durham, S. S. Gray, W. P. G. Hayward, N. G. Herreshoff, S. D. Mason, A. M. Ritchie, J. B. Russell, E. K. Turner, C. A. Wilbur and D. W. Willard.

1873.

SAMUEL E. TINKHAM, *Sec.*, 126 Thornton Street, Roxbury, Mass.

The members of the class of '73 observed the 40th anniversary of their graduation on January 11, 1913, at Buffalo, N. Y., as the guests of one of its members, General Edmund Hayes. The class association has an unbroken record of annual gatherings, the first being held at the Parker House in Boston on May 31, 1871. The meeting this year is the only one which has not been held in Boston, and the change was made, so that it would be more convenient for some of the members who live in the West. The following were present:—Philip D. Borden, Edmund Hayes, Albert W. Johnston, George H. Kimball, William T. Leman, H. Ellerton Lodge, Albert K. Mansfield, Robert A. Shailer, James E. Stone, S. Everett Tinkham, Francis H. Williams, and C. J. H. Woodbury. When it is remembered that there are only thirty surviving members of the association, scattered from Manila on the East to Los Angeles on the West, the attendance of twelve was very satisfactory. On our arrival at Buffalo, it was found that General Hayes had provided ample accommodations at the Hotel Statler.



FORTIETH ANNIVERSARY OF THE CLASS OF '73

Left to right:—J. E. Stone, A. K. Mansfield, A. W. Johnston, C. J. H. Woodbury, G. H. Kimball, W. T. Leman, Dr. Francis H. Williams,
R. A. Shailer, S. E. Tinkham, Gen. Edmund Hayes, H. E. Lodge, P. D. Borden

and before breakfast was finished on Saturday morning, he appeared and in person extended a most hearty and cordial welcome to his classmates. A few steps from the hotel brought us to a special chair car of the Inter-urban Railway which took us to Niagara Falls, then crossing the bridge to the Canadian side, a visit was made to the plant of the Ontario Power Company, which is generating electricity amounting to 135,000 horse-power and sending it over a circuit of more than 1,400 miles in Canada and New York. After several hours spent in an examination of this extensive plant, which represents the state of the art in its latest phases, utilizing both American and Continental machinery, the party entered the car again and while taking the famous Gorge ride, lunch was served, and the return trip made to Buffalo, which was reached at five o'clock. Although the day was cloudy and at times the mist was so heavy that it really turned into rain, still, thanks to the excellent arrangements of General Hayes, it was most thoroughly enjoyed by all; the only regret expressed was that the light was so poor that it was impossible to obtain a very satisfactory photograph of the party. The attempt was made, however, and it is here reproduced. At seven o'clock the members of the class were most cordially received by General Hayes at his beautiful home on North Street, and in the hearty welcome extended, he was assisted in a most gracious manner by Mrs. Hayes, who seemed to be as deeply interested as her husband in the success of this reunion. The members soon adjourned to the dining room where they found not merely the table but the whole room decorated with Technology colors. At the table they were joined by Mr. Morris B. Patch of '72 and Mr. Usher, a member of General Hayes' family. The party returned to the hotel late in the evening, at an hour more comparable to the meetings of forty years ago than to those of recent years. The next morning the party separated with many expressions of appreciation of the generous hospitality, which had been extended to them by General Hayes from the moment of their arrival in Buffalo until he waved his adieus as the train pulled out of the station.

1875.

EDWARD A. W. HAMMATT, *Sec.*, 15 Water St., Newton Center, Mass.

The annual meeting and dinner of the class was held at Young's Hotel, Friday, March 7, 1913, at 6.30 p.m. Simonds and Church were the first to greet the secretary, and each new arrival was examined as to his ability to identify Chris. who has not attended a meeting for thirty years. A few answered "not prepared." After the usual social hour, the executive committee presented its report—in the form of dinner—which was unanimously accepted. At 8.45 President Hibbard called the business meeting to order.

The records of the last meeting were read and approved. The secretary-treasurer submitted his reports which were accepted. Ballot for officers resulted in the reelection of the old board. Letters from some of the boys were read, and one from D. W. Phipps was much enjoyed. Beal recalled the incident of escape of H_2S in Windy Warren's lecture room one morning and told who were responsible. The affair caused quite an excitement at the time and Lieutenant Zalinski and Assistant Professor W. E. Hoyt were detailed to investigate the affair.—W. Lewis has recently been seriously ill with pneumonia so could not be present—W. R. Webster is in Egypt. The attendance was as follows: Beal, Church, H. Dabney, Hammatt, Hibbard, Mixer, Simonds, Stoddard, Warren.—During the year, the secretary has received notice of the death of the following members of the class: Frank Conover, died October 24, 1912—Louis H. Gibson, died November 1907—Charles W. Paine, died January 6, 1911—Francis Skinner, died November 24, 1905—Edmund M. Wheelwright, died August 15, 1912.—The secretary would again request those who have not sent in the information requested as data for new directory to *do it now*.

1876.

JOHN R. FREEMAN, *Sec.*, Grosvenor Building, Providence, R. I.

Charles T. Main, engineer, 201 Devonshire Street, Boston, has been retained for the engineering work in connection with the development of the Big Falls of the Missouri River, near Great Falls, Mont., and of Thompson Falls, on Clark's Fork of the Columbia River. The surveys of these developments have started. It is probable that the Big Falls development will have a capacity of 125,000 hp and the one at Thompson Falls 50,000 hp.

1877.

RICHARD A. HALE, *Sec.*, Lawrence, Mass.

The thirty-sixth anniversary and banquet of the class of '77, M. I. T., was held at the University Club, Boston, Wednesday, at 7 p. m. The members were the guests of President Gray, who presided. Eleven members were present, and informal remarks were made by several of the number.

Those who attended were: John Alden, chemist Pacific Mills, Lawrence; W. B. Bradford, draughtsman at U. S. Navy Yard, Charlestown; Edward W. Davis, publisher, Boston; Joseph P. Gray, president Boston Manufacturers' Mutual Fire Insurance Company, Boston; A. S. Glover, secretary Hersey Manufacturing Company, Boston; Richard A. Hale, principal assistant engineer of Essex Company, Lawrence; Herbert Jaques, of the firm of

architects of Andrews, Jaques & Rantoul, Boston, and who is also well-known as president of the Massachusetts Golf Association; Walter Jenney, vice-president Jenney Mfg. Co., Boston; Charles F. Lawton, superintendent of Board of Public Works, New Bedford; Frank E. Peabody of the firm of Kidder, Peabody & Co., bankers, Boston; and Harry C. Southworth, in business, West Stoughton.

Letters were received from absent members.

The following officers were elected: President, Joseph Gray; vice-president, John Alden; secretary and treasurer, Richard A. Hale.

1881.

FRANK E. CAME, *Sec.*, Metcalfe Apartments, Westmouth, Quebec, P. Q.

FRANK H. BRIGGS, *Asst. Sec.*, 22 High Street, Boston, Mass.

The *Los Angeles Times* pays a tribute to the architectural skill as a designer of sky scrapers of one of our class—A. F. Rosenheim, and says among other things:

When the late Herman W. Hellman had made all his preparations for the erection of the great structure on Fourth and Spring Streets which bears his name, he went to St. Louis, Mo., for an architect, and that is why Alfred F. Rosenheim has been a resident of this city from that time to the present day. The intellectual structure was solidly and carefully built, and that is probably why he was sought for by those who were about to erect great buildings.

Alfred F. Rosenheim, going into business for himself in St. Louis, undertook plans for great buildings all through the Central West and in Eastern cities as far as Boston. The Hellman building, his first job here, absorbed before it was turned out of the architect's hands \$1,250,000.

The next big job was the Hamburger building, which covers half a block fronting on Broadway, Hill and Eighth Streets and houses the largest department store west of Chicago, if not the largest in the United States. This building cost, before the owners took it, over a total of \$2,000,000. It is, like the Hellman building, of the most solid construction, and old Father Time will need all his teeth and must have them filed sharp, too, if in a hundred years he has made an impression upon it.

Another notable structure planned and built under the supervision of Mr. Rosenheim is the house of worship of the Second Church of Christ, Scientist, on West Adams Street near Hoover, a beautiful, purely classic building which cost \$750,000, and makes one think of some of the buildings on the Acropolis at Athens when Greek architecture was in its prime.

Mr. Rosenheim was married September 13, 1884, to a Boston lady, and she now presides over his home in Los Angeles.

The architect is a member and director of the American Institute of Architecture, he is a past president of the local chapter of this order, where he served for three years, he is president of the Fine Arts League of Los Angeles, member of the Municipal Art Commission by the mayor's appointment, is chairman of the advisory commission on the revision of ordinances appointed by the Council and a member of the board of governors of the art museum. These are all honorary positions, and those who serve on them give their time and talents patriotically for the sake of the people.

1882.

WALTER BRADLEE SNOW, *Sec.*, 170 Summer Street, Boston, Mass.

The thirty-first annual dinner of the class was held at the new Engineers Club, Boston, on Thursday, February 6. There were present Darrow, French, Gooding, Herrick, Jenkins, Munroe, A. W. Walker, Warren and W. B. Snow.—John P. Wood, who is now president of the National Association of Woolen Manufacturers, was recently in the public eye as a witness before the Ways and Means Committee, at Washington, in connection with the discussion of matters relating to Schedule K.—John F. Low has moved to 49 Pembroke Street, Newton, Mass.—J. P. Munroe is busily engaged as a member of the building committee for the New Boston City Club building.—W. B. Snow was recently elected president of the Reversible Collar Co., Boston.—F. C. Channing, who changed his name some time since from Frank C. Morrison, is now located at 907 Alaska-Commercial Bldg., San Francisco, Cal.

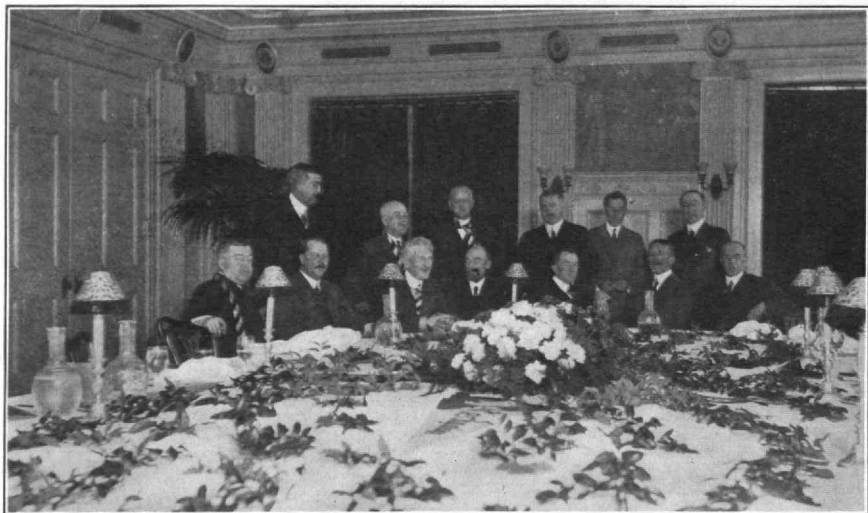
The secretary has only recently learned of the death on September 7, 1911, of Harry M. Neff, who was a special architect associated with the class for some time. His last letters were written in the spring from the Minnequa Hospital, Pueblo, Colo., but gave no clue to his condition.

1884.

HARRY W. TYLER, *Sec.*, Mass. Inst. of Tech., Boston, Mass.

H. D. Hooker is now at 133 Canner Street, New Haven, as architect in the chief engineer's office of the New York, New Haven & Hartford Railroad.—P. L. Fong is telegraph superintendent of the Canton-Hankow, Railway Hupei-Hunan Section.—H. A. Boardman has become superintendent at the Manville Bleachery, Manville, R. I., post-office address, Woonsocket, R. I.—M. W. Sung is at Shanghai with S. C. New, secretary, Kiangnan Dock & Engineering Works.

—We have a letter from M. W. Sung, Shanghai, China, from which the following extract will be found of interest: "I beg to acknowledge receipt of your favor of the 25th of November, 1912, notifying me of a circular being sent to me, giving the progress of the Alumni Fund of the Massachusetts Institute of Technology, which circular duly reached me. I have perused it very carefully and note with great pleasure the great progress our Institute has made in recent years in the erection of educational buildings, its equipment, dormitories, grounds, etc., all of which tends to make our Institute more famous in the future; this is extremely gratifying to me—one of the alumni out in the Far East—and I rejoice in its growth and expansion for usefulness yearly for the betterment of a tech-



CLASS OF '85

A few of Don MacRae's guests at breakfast, Hotel Astor, New York City, January 17, 1913



CLASS OF '85

Guests of Charles R. Richards, University Club, New York City, January 18, 1913

nical education, which is now one of the most important professions that is offered for one, who has an inclination for that vocation. I believe you have quite a number of Chinese students in the Massachusetts Institute of Technology at present, a few I am told are learning marine architecture, a most useful profession in China upon their return, as China needs just such kind of men, especially with practical knowledge and experience in shipbuilding, which we lack at the present moment, though England has turned out one or two men, who are excellent in marine architecture, but we require more practical experience, theoretical is good; but practical is the better of the two."

1885.

I. W. LITCHFIELD, *Sec.*, Mass. Inst. of Tech., Boston, Mass.

Those of the class who attended the great Technology reunion in New York carried away never-to-be-forgotten memories of that very happy event. The usual thing, of course, happened and '85 made by far the best showing at all of the functions. At the class luncheon there were thirty men present, a larger proportion of members than any other class offered. The largest attendance in actual numbers was that of the class of '98 with forty-four members. In actual numbers there were only two other classes having a larger attendance,—'93 with thirty-five members and '96 with thirty-one members. Not all of the members of the class attending the reunion could be in New York in time to be present at Don MacRae's breakfast on Friday morning and not all who were in the city had brought alarm clocks to arouse them at 8.30. There were about twenty men present, however, and it was one of the very delightful features of the reunion. The breakfast room was decorated with Technology and Red Sox banners, the decorations extending to each individual member who was presented by mine host with a Technology four-in-hand scarf of cardinal and grey. Don had these especially made for the occasion and during the celebration they were marked at the principal points of interest in and about New York. Those present at the breakfast were: Bates, Brown, Dewson, Eaton, Kimball, F., Litchfield, Little, McKim, MacRae, D., Merrill, Morss, Mullins, Nye, Page, Plaisted, Rand, Richards, Spalding, Talbot and Lyon.—The largest number of men that we have had together on such an occasion for many years was present at Charlie Richards' luncheon at the University Club on Saturday noon, January 18. This luncheon was a wonderful affair and to it came a number of men who had not met with the class before for many years and some who were with us for the first time. Everyone joined in grateful appreciation of the host who had made this delightful meeting possible. The affair was entirely informal and before and after-

ward there was opportunity to renew old acquaintances. The class photographers, Dewson and Mullins, took flashlights of the group after luncheon and later on the entire crowd inspected Cooper Institute of which Richards is director. From there we were taken to his apartments where the rest of the afternoon was pleasantly spent in comparing notes covering many years. Those present at the luncheon were: Bates, Brown, Dewson, Dodge, Eaton, Fiske, Kimball, F., Litchfield, Little, Lufkin, Lyman, McKim, MacRae, D., Merrill, Morss, Mullins, Mumford, Nye, Page, F. H., Pratt, Rand, Richards, Robertson, Spalding, Talbot, White, Williams, S., Lyon, Pickernell, and Baker.—The attendance at the banquet at the Plaza Saturday evening included nearly every member at the luncheon. It is likely that the actual showing of the class at the banquet was larger than any other in point of actual figures.—Fred Newell, director, U. S. Reclamation Service, Washington, D. C., was recently elected vice-president of the Cosmos Club, of Washington.—Dave Baker was present at the class luncheon but could not remain to the banquet as he had to hurry home to prepare to leave for Australia in a matter of two or three days. Taking Mrs. Baker he sailed for Newcastle, Australia, where he is to build a complete iron and steel works for the English interests connected with the celebrated Broken Hill Mine Company. It is estimated that it will take five years to build this immense plant. He left January 30 and probably arrived March 15. Dave was well and apparently enjoyed the prospect of the great work before him.—On the occasion of the inauguration of President Newman of Howard University, Washington, D. C., F. H. Newell was delegated to represent the Institute of Technology.—It is with great pleasure that the secretary announces the marriage of James Hervey Simpson Bates to Kate Stevens Bingham, daughter of James I. Stevens, February 14, 1913. Bates has the hearty good wishes of every member of the class.

1886

ARTHUR GRAHAM ROBBINS, *Sec.*, Mass. Inst. of Tech., Boston, Mass.

There were fifteen members of the class present at the various functions of the alumni meeting in New York, three of whom were present with the class for the first time since graduation.—After the class luncheon at the Savoy the party divided into groups, one of which visited the New York Central terminal improvements between 56th and 42d Streets, under the guidance of Jordan who is directing the work.—Fogg has a son in Columbia who is a worthy descendant of '86, he having won the Pulitzer Scholarship, the Hewitt Scholarship, and a prize of \$250 given by the New

York Latin Club, all in his first year.—J. W. Smith addressed the Boston Society of Civil Engineers March 19, on "Some Features of the Contracts, Specifications and Construction of the Catskill Water Supply for the city of New York,"—a gigantic engineering work Smith is directing as chief engineer.—Noyes found recreation and rest from his many exacting activities in a trip to Bermuda during the recent midyear vacation.—The following are press commendations of some of Woodbury's at a recent exhibit at the Boston Art Club:

Mr. Woodbury has surpassed himself in his splendid group of six watercolors on the north wall. Two of these works, "The Nutmeg Island," variations on the same motive, painted in the West Indies, indicate a new development in his watercolor work, and have a distinctly Turner-esque flavor. "Monadnock" is one of the most beautiful and impressive of his series of pictures of this mountain, and one of the most striking pictures of a mountain that he has ever made. The color is superb, and the individual character of Monadnock is rendered with admirable understanding and sympathy. "The Rainbow" is another work of distinct originality and magnificent spirit and breadth. "Evening," a more sombre subject, is very handsome in its way, and is the picture to which the Evans prize was awarded by the American Watercolor Society in 1911.

1887.

EDWARD G. THOMAS, *Sec.*, Kewanee, Ill.

John W. Stearns is engaged on construction work in connection with the improvement of the Cumberland River in Alabama and is at present stationed at Lock No. 4. His present address is Cumberland City, Ala.—The National Employment Exchange, which was founded a few years ago by a group of well-known business men in New York to act as a clearing house between employers and employees has decided to establish a technical department devoted solely to the needs of men with technical training. This department has been placed in charge of H. C. Spaulding who was graduated from the Massachusetts Institute of Technology in 1887 and has been connected with the Thomson-Houston Company, the Siemens & Halske Electric Co., the Blake & Knowles Pump Company and the Yale & Towne Mfg. Co. The commercial and technical departments are located at 30 Church Street, New York, and the manual branch for skilled and unskilled labor at 56 and 58 Cooper Square, New York.—A reform ticket won out last November in the affairs of Cook County, Ill., the county including Chicago. One of the early acts of the new administration was to oust the architect of a new \$3,000,000 hospital, which has been started, appointing in his place Richard E. Schmidt. Dick will have his political troubles on this job, but the county is to be congratulated on the change. The firm of Schmidt, Garden & Martin have built twenty-one hospitals in and around Chicago, so that they bring ripe experience to bear on the many and peculiar problems presented in hospital construction.—Wakefield was

married on January 22 last to Mrs. Annabel Clark. Their home will be for a time at 36 High Street, Brookline, Mass., but they will shortly move out to the country.—On February 28, the class held its annual dinner at the Engineers Club, Boston.—There were present:—Cameron, Noyes, Very, Stewart, Lane, H. F. Bryant, R. E. Curtis, W. A. Whitney, Coburn, S. W. Bowles, E. A. Jones and W. R. Thomas; the last three being with us for the first time since graduation. There was no special program for the evening, but after partaking of a very enjoyable dinner, the evening was spent in renewing acquaintance with the three prodigals and in a general review of our quarter of a century of graduate life. Jones, Thomas and Bowles all promised that they would make an effort to come next year and in the future be more neighborly and we trust that this spirit may enter into some of the other delinquents. If they will only notify us that they are coming, they may rest assured that the fatted calf will be killed. Cameron had recently returned from his trip around the world, and seemed to have not only enjoyed the trip greatly, but to have greatly benefited by the vacation. He reports, however, that he is so busy making up for lost time, that he is sort of nullifying the good effects. Coburn arrived at the dinner about 9 o'clock, coming directly from the train on his return from another trip to southern Missouri.—The committee on the souvenir book for the twenty-fifth anniversary beg to state that the returns of data have been coming in fairly well but they are anxious to get more extended letters from some of the men and particularly anxious to get photographs taken within recent years. If you have no picture taken in the last few years, hustle up and get one. If you have not the price, get it on credit,—but whatever you do, get a picture, and send it along to the committee. The committee can rake up pictures of you in the ancient days and assure you that they will use the worst one they can find unless you come across with others.

1888.

WILLIAM G. SNOW, *Sec.*, 24 Milk Street, Boston, Mass.

The committee in charge of the twenty-fifth anniversary celebration of graduation has planned for a four days' outing on Cape Cod including an automobile trip, an inspection of the canal, golf, tennis, base ball, etc. Everything will be done to make this the greatest event since graduation. The dates selected are June 6, 7, 8 and 9. Reserve these dates. Bulletins giving details will be issued from time to time.—George C. Scale's new address is 475 Center Street, Newton, Mass.—In the list of sons of former students at the Institute is the name of K. M. Sully son of J. M. Sully, '88.—The class luncheon held at the University Club, New York, January 18, was a great success and was arranged for by Frank A.

Moore. Members present: Besler, Fuller, Flint, Blake, Hazen, Blood, Bird, Moore, Ellis, Buttolph, Holman, Binney, Snow. At the Technology banquet in the evening, Horne, Stone and Collins in addition to most of the above named men were present. Thompson and Flint were also present at the reunion.—Stephen Child, '88, who is becoming pretty well-known as a landscape architect, with offices in Boston and Santa Barbara, spent the past summer in Europe studying in his specialty. He devoted a considerable portion of his time to study of conditions in southern Europe applicable to his growing practice in southern California, and also especially directed his attention to city planning work in Europe, visiting Germany, France and England. He had the opportunity while in England to visit under the guidance of Mr. Raymond Unwin the noted city planner, the latter's work at Letchworth, "the first garden city," and Hampstead Garden Suburb,—very valuable experiences. Child reports lots of work in California, a large park and a fifty-acre-school-grounds at San José, and plans for a so-called "Around the City Boulevard" at Santa Barbara, being of especial interest at the present time.—W. H. Blood lectured a short time ago at Wellesley College on "The Utilization of Water Power in the United States."

DEATH OF L. F. HOBART.

Lowell F. Hobart, '88 died recently at his home in Milford, Ohio. Mr. Hobart was a past master of the Price Hill Lodge of Masons, past high priest of Price Hill Chapter and past eminent commander of Hanselmann Lodge, Knights Templars. He also was a member of the Scottish Rite, the Syrian Temple and the Business Men's Club. He attended Urbana University and the Institute. He was president of the Diamond Distilling Company and secretary and treasurer of the James Kidney Company.

1889.

WALTER H. KILHAM, *Sec.*, 9 Park Street, Boston, Mass.

Eighty-nine's lunch at the New York reunion took place at the Hotel McAlpin and was greatly enjoyed by the fifteen members present, particularly the exchange of civilities with the class of '91 to which Fiske contributed some anecdotes in his well-known humorous vein. After lunch the class adjourned to Fiske's offices near by and passed a happy afternoon swapping yarns. Fiske's exhibit of tapestry brickwork was a genuine revelation to many of the members, of the possibilities of this material. Next year will be our twenty-fifth anniversary and the president has appointed Whiting, Howard, Fiske, Kilham, Thurber, Wales and Alley a committee to arrange a suitable celebration.—Hobbs has been elected president of the Arlington Mills and will be the executive

officer of the corporation. He was the president of the National Association of Cotton Manufacturers in 1910-12. He is a member of the executive committee of the National Association of Wool Manufacturers, is the director of the New England Trust Company of Boston and is associated with many other business organizations.—Crane, who is now one of Philadelphia's leading architects, has been appointed superintendent of Independence Hall in that city. The Philadelphia *North American* has the following to say about this appointment:

Edward A. Crane, one of the city's leading architects, a member of the firm of Rankin, Kellogg & Crane, of the Union League, American Institute of Architects, the T Square Club and Pennsylvania Society of the Sons of the Revolution, has been appointed superintendent of Independence Hall at a salary of \$800 a year. He succeeds John J. McCormick known as "Fish" McCormick, one of Magistrate "Jimmie" Carey's henchmen in the fifth ward. The salary will hardly pay for the care of the automobile in which Mr. Crane rides to town from his home at 412 West Price Street, Germantown. But it is not a matter of salary; the announcement might have been more accurately made if it had been stated that Crane had made a gift of service to the city for which he would charge private clients many thousands. Mr. Crane is interested in colonial architecture. He has written a monograph on colonial architecture in Charleston, S. C., and Savannah, Ga. Mr. Kellogg, one of his partners, is one of the committee on the restoration of Congress Hall, and John Hall Rankin, the other member of the firm, is a member of the mayor's committee on comprehensive plans. Mr. Crane sees in this appointment the opportunity of converting Independence Hall into a national shrine such as the tomb of Napoleon in Paris.

—George M. Basford, assistant to the president of the American Locomotive Company, has resigned to become chief engineer of the railroad department of Joseph T. Ryerson & Son, Chicago, with headquarters at 30 Church Street, New York. After leaving Tech Mr. Basford entered the Charlestown shops of the Boston & Maine and later of the Chicago, Burlington & Quincy Railroad. He then became connected with the motive power department of the Union Pacific after which he was signal engineer of the Chicago, Milwaukee & St. Paul. Here he became identified with the development of railroad signals and for a short time was with the Union Switch & Signal Co. In 1895 he became editor of the mechanical department of the *Railway and Engineering Review* and two years later editor of the *American Engineer and Railroad Journal*. He became connected with the American Locomotive Company in 1905. In an article of nearly two pages the *Railway Age Gazette* speaks of the important work Mr. Basford has done along particular lines. He is the father of the Railway Signal Association with which he has been connected since it was started. Basford is particularly known because of the impetus he gave to the development of the movement for educating and training apprentices and workmen, to the study of which he has given many years of valuable time and has written and presented the matter personally at many public meetings. Few people can number so many real friends as can Basford. Wherever he has gone he has made a host

of them as he did at Technology. About twenty years ago, sixty of his intimate railway friends presented him with a bound volume of personal letters of appreciation accompanied by a substantial check to defray expenses of a trip abroad.

—George A. Orrok, mechanical engineer for the New York Edison Company, presented a paper February 13 on the "Transmission of Heat," before the Brooklyn Engineers' Club.—Albert Sauveur gave an interesting lecture in the hall of the Franklin Institute, February 13, on "The Metallography of Iron and Steel." The *Evening Telegraph*, Philadelphia, publishes the following account in regard to Sauveur and his work:

Some twenty years ago both scientific investigators of iron and steel and steel manufacturers were wondering why specimens of steel containing half of 1 per cent. of carbon should show variations in tensile strength from 75,000 to 200,000 pounds per square inch, and why such specimens, though possessing exactly the same chemical composition, could in one case be stretched 25 per cent. and show no signs of fracture and in another case could not be stretched at all. It was the necessity of explaining such phenomena that gave birth to the science of the microscopic examination of the structure of metals or metallography.

Professor Sauveur for some years has been engaged in investigating such physical properties as annealing and hardening of steel, in microscopically analyzing high and low carbon steels, cast steel and malleable iron and alloys. His results have materially contributed to this science of metallography.

Professor Sauveur was graduated in mining and metallurgy at the Massachusetts Institute of Technology in 1889. For eight years following his graduation he was chemist and metallurgist in various steel companies. In 1899 he was appointed instructor in metallurgy at Harvard University.

The following year he was made assistant professor of metallurgy and metallography, and in 1905 he was appointed professor, an appointment which he still holds. He was lecturer on metallography at the Massachusetts Institute from 1898 to 1903. He is the author of many publications on metallurgy of iron and steel and metallography.

—E. V. Shepard's book on "Scientific Auction Bridge" has just been published by Harper & Brothers. It is a clear and scientific exposition of the game and is of valuable aid both to the beginner and experienced player. It is clearly and handsomely printed and forms a very attractive book. Shepard writes that he will gladly send complimentary copies to any of the Tech clubs or societies where any such book would be of interest.—'89 seems to be rendering a good deal of assistance to the city of Philadelphia. The *Boston Transcript* of March 15, 1913, speaking of Pike's work as chief of the Electrical Bureau says:

As has already been said, this is affiliated with the police and fire bureaus in the great Department of Public Safety. It includes in its scope all the electrical matters pertaining to the city functions, electric lighting, fire and police signalling, and the telephone work, together with various minor duties like licensing the operators of passenger elevators.

Mr. Pike has in the past year been able to carry on his bureau with a force of 301, against 377 previously employed, and has effected a saving in expenditures of about 4 per cent. with a gain in efficiency of service equivalent to about 10 per cent. of the total cost.

Modern systems of accounting, purchasing and handling have been installed in

the year. The municipal telephone system has been extended by adding eight branch exchanges. This is a large establishment, having more than fifteen hundred telephones, and while it has always been considered well managed, Mr. Pike has introduced methods that now secure a reply in five seconds. This is work that is hard to match in all the telephone world.

The fire alarm system has been extended by fifty-four street boxes and improved by splitting circuits and getting the wires underground. The frequency of testing has been increased. The police patrol, which is quite the peer of that of any other city, has been improved by the establishment of one new station and a dozen street boxes. The latter are now of improved design, which makes less the danger to patrol-men in case the wires become crossed with high-tension circuits.

In the city power plant a rearrangement of the piping affording a chance to utilize the exhaust has resulted in the saving of 2,500 tons of coal.

One of the important pieces of work during the year was the remodelling of fourteen of the elevators in the City Hall, and so safeguarding them that for the first time they have been approved by the elevator inspection service. Plans have been made for five new electric passenger elevators and one sidewalk freight lift.

The arc-lighting of Philadelphia is an important matter wherein the city claims not only the greatest number of such lights—unless the recent contract in Chicago has been completed—but the highest quality. There are certain portions of the city that are excessively illuminated, but everywhere the arc lights are excellent. Extensive tests have been made for the first time to determine the quality of performance of the lamps, and further there has been obtained a lowering of the contract price so that about 1,800 more lamps may be used by the city for the same sum.

The surveys by the bureau have included all the city's overhead constructions and about one-quarter of those of the public-service corporations. New regulations for size and methods of support of electric signs have been promulgated, new theatre and motion-picture show requirements have been established and the complete inspection of all such establishments has been made.

The man who has accomplished this great amount of work getting greater efficiency and extensions of his systems with a smaller pay roll, studied at Fryeburg, Me., Academy before going to Tech. For a while he was instructor in electrical engineering at the University of Pennsylvania, electrical engineer of the Merrimac Manufacturing Company, Lowell, and later organized a company of electrical contractors—Keller-Pike. He has been president of the electrical section of the good old Franklin Institute and of two other Philadelphia electrical associations and is director of the International Society of Municipal Engineers. He comes to the Philadelphia municipal work wonderfully well equipped.

1890.

GEORGE L. GILMORE, Sec., Lexington, Mass.

Allen H. Rogers in March was in Butte, directing operations at the Butte & Superior Mines.—We are advised of the death of J. H. O'Brien on September 23, 1912.—Prof. Gary N. Calkins of Columbia University gave a lecture before the Society of Arts, on February 11, 1913, at Huntington Hall, on "New Light on the Old Problem of Age and Death in Some of the Lowest Forms of Life."—Charles Hayden was at Palm Beach in the early part of March, stopping at different resorts on his return North.—G. L. Gilmore, with Mrs. Gilmore, sailed from New York on February 8, on the White Star Line Steamer *Laurentic* for a four weeks' trip to Panama and the West Indies.—At the opening of the Engineers Club in Boston on January 25, Atwood, Emerson, and Gilmore,

of the class of '90 were present.—In February, Charles Hayden was re-elected director of the Shawmut National Bank, in Boston.—J. O. DeWolf's business address is 19 Milk Street, Boston, Mass.—Herbert C. Tuttle is rooming at 24 West 44th Street, New York, this winter.—F. C. Moody is with the Bell Telephone Company of Pennsylvania, at Harrisburg, Pa.—Arthur B. Stearns is with the Bath Iron Works, at Bath, Me.—William B. Reed is with the H. B. Smith Company, of Westfield, Mass.—E. A. Palmer's address is Box 404, Richmond, Va.—Albion L. Page is with the Vapo-Cresolene Company, 62 Cortlandt Street, New York City.—George L. Nelson is at Marshfield Hills, Mass.—William L. Murdock is with the Northwestern Leather Company, Sault Ste Marie, Mich.—Miss Mary L. W. Morse is at Poland, Ohio.—Harry W. Kern has been located at 179 West Washington Street, Chicago, Ill.—L. B. Holmes is with the Linscott, Tyler Company of Rochester, N. H.—Winthrop T. Hodges is at 177 State Street, Boston, Mass.—Adolph Hallenberg is in Louisville Ky.—Alfred H. Granger is with Hewitt, Granger & Paich of Philadelphia, Pa.—The following item from the *Boston Herald* of February 27, may be of interest: "In a lecture on 'The Earth and Sun as Magnets,' Dr. George Ellery Hale, director of the Mount Wilson solar observatory, announced that observations made on Mount Wilson during the last year proved the sun to be a magnet.

"Its magnetic poles lie near the poles of rotation and correspond in direction with the magnetic poles of the earth. The rotation of the sun on its axis will account for its magnetism, on the theory that the sun contains nearly equal charges of positive and negative electricity, the negative charge being predominant. The magnetism of the sun has no appreciable effect on the earth."—In a letter which he sent to Governor Foss recently, Edwin F. Dwelley of Lynn, secretary of the Public Utilities Association, severely criticises the policy of the Commonwealth in regard to the control of public service corporations, characterizing it as a grave injustice to the stockholders. The letter says in part:

For a quarter of a century the Commonwealth has supervised and controlled public service corporations under a policy which, while greatly regarding the interest of that portion of the public which these corporations serve, but little regarded the interests of that portion of the public which invested its money in the public service.

This policy has resulted in great injustice to the stockholders of at least one public service corporation, and will, if continued, result in great injustice and loss to the stockholders in all public service corporations which come under the jurisdiction of Massachusetts laws.

The Commonwealth, through its Railroad Commission, fixed the price of some millions of dollars of par value of stock in the Boston & Maine Railroad Company at \$190 a share, but today the stockholders who bought that stock, influenced thereto largely by the fact that the Commonwealth said that the stock was worth that price and that the Boston & Maine Railroad was under State supervision and control, cannot sell their stock for more than \$96 a share. These stockholders have sustained a loss of nearly 50 per cent. and upon the Commonwealth alone rests the responsibility for that loss, and the Commonwealth denies all responsibility.

Is the Commonwealth to continue this policy?

If the Commonwealth undertakes to fix the price of stock of public service corporations and to supervise, regulate and control rates for and character of service rendered, consolidations and combinations, ought not the Commonwealth, in all justice, to protect the investor from loss?

—S. A. Moss, as president and controlling director in big enterprises, has now an enviable reputation in the West where he has been devoting his activities almost entirely to mining and real estate operations since his graduation. Moss was attracted by the gold-mining possibilities of California and his initial venture was in El Dorado County, where he acquired practical experience. The *San Francisco Chronicle* of recent date says of him:

The Calaveras Gold Dredging Company was organized in 1902 and Moss became its president. The company held 350 acres along Calaveras creek. The ground had been carefully sampled and resampled, and steps were taken at once to install dredges, the first of which was constructed in 1903 and began work in 1904. Subsequent operations have been continuous and successful, and their scale has been greatly extended, making it possible to work much larger area with consequent increased returns.

His mining achievements in California paved the way for his entrance into the Republic of Mexico, where his explorations have been directed largely with a view to the acquisition of gold-bearing properties that will admit of operation according to the methods he has perfected in this State. His interests there require his presence frequently and entail much traveling.

Moss is a member of the Bohemian, University and Union League Clubs of San Francisco, and of the Rocky Mountain Club of New York city.

He is thoroughly western in his tastes and temperament, and has brought into his western career a wonderful endowment of character, resolute purpose and culture. In compassing his own success he has elevated others who are connected with him or whose interests increased in value through the appreciation of his own. He has become one of the significant factors in the upbuilding of the West, making it more attractive for the generations that are to come.

In the course of his mining work Moss has worked out many nice problems confronting the industry, with reference particularly to dredging, where the handling of large bodies of low-grade gravel was involved, requiring a minimizing of cost in order that a margin of profit would remain for the operator. The gold mining fraternity has been a heavy beneficiary in this work, which has aided materially in increasing the aggregate of California's gold production.

1891.

HOWARD C. FORBES, *Sec.*, 88 Broad Street, Boston, Mass.

Aiken's account of the class reunion in New York is as follows: "The following men were at the luncheon: Howard, Vaillant, Dart, Bowen, Garrison, Damon, H. H. Young, Bassett, Weed, Wilder—from Boston—with a friend, Mr. Randolph, as guest—Leeming, Campbell, Gottlieb, Alley, Pierce, Knowles, Franch, Hopton, Aiken, Punchard, Trowbridge, Blanchard, Alley, Douglas, and last but not least Whitney from Hartford. We also had Vance from Pittsfield and Church from Great Barrington—'92 men—who asked to come in with us. We had lunch, as you know, at the Hotel McAlpin and had a good time. There were no formal

speeches. The class of '89 had lunch in an adjoining room. We sent them in our best wishes, to which document each fellow present signed his name. In return they sent us a little screed.

At the dinner in the evening the following '91 men, were present: Dunham, F. F. Moore, Blanchard, Pierce, Bassett, Weed, Hopton, Aiken, Knowles, Damon, Douglas, Alley, Bowen, Vaillant, Young, Gottlieb, Leeming, Howard, Dart and Fiske. The dinner was a great success—in fact the whole reunion was a success. I understand that over 600 were present at the dinner. We were all sorry that you were not with us. I am leaving tomorrow for Cincinnati and Oklahoma to be gone about a month. My address will be 124 East McMillan Street, Cincinnati, the greater part of the time."

1892.

W. A. JOHNSTON, *Sec.*, Mass. Inst. of Tech., Boston, Mass.
C. H. CHASE, *Asst. Sec.*, Tufts College, Mass.

The following are the addresses of a few of the members of the class whose addresses have been lost for a time: W. L. Adams, 1601 Ashland Block, Chicago, Ill.—W. C. Capron, 607 Fifth Avenue, North Great Falls, Mont.—Stephen R. H. Codman, 31 Beacon Street, Boston, Mass.—J. M. Ferriday, Hagerman Bldg., Colorado Springs, Colo.—Herbert R. Fitch, 1243 Fifth Street, San Diego, Cal.—Albert Godchaux, Godchaux Bldg., New Orleans, La.—Henry M. Greene, 215 Boston Bldg., Pasadena, Cal.—Bayard Jones, 40 West 28th Street, New York City.—A. F. Knudsen Krotona Hollywood, Los Angeles, Cal.—Harry A. Ladd, American Steamship Company, Santa Barbara Unit, Santa Barbara, Chihuahua, Mexico.—John G. Morse, 31 Milk Street, Boston, Mass.—A. Parker Newman, 129 Malden Street, Boston, Mass.—H. E. Perry, Edgewater Finishing Company, 4080 Frankford Avenue, Philadelphia, Pa.—Mrs. C. E. Robbins, 720 Main Street, North Leominster, Mass.—James H. Slade, Secretary of Index Bureau, 88 Broad Street, Boston, Mass.—Richard B. Snow, Superintendent Burgess Mills, Pawtucket, R. I.—Stansbury Sutton, Arrott Bldg. Pittsburgh, Pa.

The following members were at the banquet at Hotel Plaza, Saturday, January 18, 1913: Charles H. Bigelow, Millville, N. J., engineer with Millville Mfg. Co.—George F. Eldridge, 149 Broadway, New York, of B. Nicoll & Co. (steel and iron).—W. Spencer Hutchinson, 8 Congress Street, Boston, Mass., mining engineer with the General Exploration Company.—George Hunt Ingraham, 2A Park Street, Boston, Mass., architect.—Leonard Metcalf, 14 Beacon Street, Boston, Mass., consulting civil engineer.—H. S. Miller, Elizabethport, N. J., secretary, Diehl Mfg. Co. (electric motors and power apparatus).—Herbert R. Moody, College of the

City of New York, New York, professor of chemistry.—Walter M. Newkirk, Frankford, Philadelphia, Pa., assistant manager, William & Harvey Rowland, Inc. (automobile springs).—Frank E. Newman, 1123 Broadway, New York, architect.—Charles F. Park, Massachusetts Institute of Technology, Boston, Mass., associate professor of mechanical engineering.—Arthur G. Pierce, 2211 Farmers Bank Bldg., Pittsburgh, Pa., district manager, the Cutler-Hammer Mfg. Co. (electric controllers).—F. L. Rhodes, 15 Dey St., New York, N. Y., outside plant engineer, American Tel. & Tel. Co.—Philip Augustus Warner, 251 West 89th Street, New York, N. Y.—Charles C. Waterman, 15 Dey Street, New York, N. Y., with engineering department, American Tel. & Tel. Co.—H. S. Webb, Scranton, Pa., principal of schools of telephony and telegraphy, International Correspondence Schools.—George V. Wendell, Columbia University, New York., professor of physics.

Men at Friday's mass meeting (not at banquet): Frank C. Shepherd, Boston, Mass., construction superintendent, Boston & Maine Railroad.—A. W. Dean, 15 Ashburton Place, Boston, Mass., chief engineer, Massachusetts Highway Commission.

Men at class luncheon (not at banquet): Elmer G. Manahan, 13 Park Row, New York, in charge of filtration division, department of water supply, gas and electricity of New York.

The following members met at luncheon at the Merchants Club, during the New York reunion, and spent a jolly afternoon together. They were Eldridge, Moody, Newkirk, C. C. Waterman, Miller, Wendell, Hutchinson, Manahan, Bigelow, Rhodes, Pierce, Ingraham and Metcalf. During the afternoon notes were compared as to the doings since graduation of the various men present.—It is interesting to note the growing responsibilities carried by men of the class of '92 and the marked tendency of the men to leave the purely engineering field for the broader and more attractive field of administrative work:—G. F. Eldridge, went after graduation to the steel plant of the Pencoyd Iron Works and after two months in the laboratory he went into the Basic open hearth department, and after several years experience in different mills, into the administrative end of the business in New York.—H. R. Moody dwelt upon the great opportunity open to chemists in the growing commercial development of manufactures depending upon applied chemistry, not only in the laboratory, but as superintendents and in research work leading to new manufactures and the improvement of old processes. Moody taught three years at Tech, four at Columbia, and is now engaged upon advanced work and chemical research made possible by the development of the electric furnace. He is engaged in research in the development of a process for the production of nitrogen salts upon which important patents are pending.—W. M. Newkirk began work in the engineering field upon the installation of the municipal light plant at Detroit, then drifted into the manu-

facturing field and is now with the William and Harvey Rowland Company, engaged in the manufacture of high grade automobile springs, using chiefly alloy steel. This business is one requiring careful attention to technical detail, and he is modernizing a plant established more than one hundred years ago and ever since in the control of the same family.—C. C. Waterman, as a telephone engineer, has been engaged in line and exchange construction in the Middle West. Was four years in Atlanta rebuilding exchanges, then five years in Boston and now in New York.—H. S. Miller, is engaged with the Diehl Company in the business end of the manufacture of direct current motors. Formerly they gave attention to fans but now to power apparatus principally.—G. V. Wendell, after four years in Boston, went abroad for study at Leipsic and Berlin where he took his doctor's degree. Returning first to Tech, he went in 1907 to Stevens as head of the department of physics, then in 1910 to Columbia to reorganize the work in physics for the engineering schools.—W. Spencer Hutchinson, after a year with Dr. Tyler who was then secretary at Tech, went into underground gold mining in California, then managing work in Idaho and Missouri. For ten years now he has been engaged in consulting work with an office in Boston, but covering in his travels the United States, Canada, and Mexico.—E. G. Manahan has been engaged largely in sanitary engineering and water works construction. He was largely responsible for the details of the design of the Cincinnati Water Filtration Plant, probably the foremost of its kind in the world, the work being done under Chief Engineer George H. Benzenberg. Subsequently, he was in New York in the employ of Hering & Fuller, consulting engineers, and is now in the New York City service in charge of the design of the Croton Filter Plant.—F. L. Rhodes has been engaged almost wholly since graduation in telephone work and is at present outside plant engineer of the Central Engineering Bureau of the American Telephone Company,—a very responsible position. As such, he has to do with the conduits, cables, pole lines and other engineering details incident to the construction work, and has done considerable work along lines for improving the efficiency of certain branches of the service. Rhodes reports that 167 Tech men are in the telephone business in this part of the country, including those in the employ of the American Telephone Company and some of its subsidiaries and the Western Electric & Telephone Co.—A. G. Pierce reports that he was with the Boston Edison Electric Company for thirteen years on different branches of the operating service. He then entered the employ of the Cutler-Hammer Company of Milwaukee, with headquarters in Pittsburgh, and is now in charge of their office there working in the selling rather than the designing field. The company makes a specialty of electrical controllers, rheostats, lifting magnets, etc. He is also much interested in public service work of various kinds.—G. H. Ingraham

began private practice in Boston, as an architect, in 1895 and for some time maintained a branch office in Detroit, where he was doing considerable work. Last year he took into partnership, Hopkins, the present firm style being Ingraham & Hopkins. While much of his work has been in the line of house building, Ingraham has done considerable work of monumental nature, having in hand at the present time the construction of the new hospital at New Bedford, the town hall at Braintree, etc. At Professor Chandler's request Ingraham has in the past taken an active interest in the architectural department at the Institute, giving courses upon working drawings and specifications.—Leonard Metcalf reported that after being in a consulting engineer's office for a period of three years, during which time he supervised construction work in a number of different cities, he had charge for two years of the mathematics and engineering department at the Massachusetts Agricultural College. Returning to private practice in 1897 in Boston, he took into partnership Mr. Harrison P. Eddy of Worcester, in 1907, with whom he is carrying on a consulting engineering business. His work has been largely along water works and sewerage construction lines coupled with the active management of various water works and electric plants in the middle West. He has also taken an active interest in public-service matters and in the affairs of various engineering societies. He reported making interesting studies during the past year upon water rights in Colorado, the drainage of the Florida Everglades and irrigation problems in Cuba.—John A. Curtin has been suggested as a candidate for Congress by the Republicans of Brookline to succeed Congressman Weeks who recently has been elected senator. The boom for Curtin appears to be gaining strength and we trust he may be successful.—Elisha Lee took an active part in the conferences between representatives of the government, of the railroads and of the firemen in the recent controversy between the firemen and the eastern railroads for a 42 per cent. increase in their wages. Lee was chairman of the committee chosen to represent the railroads interested which numbered fifty-four.—Charles H. Bigelow is now chief mechanical engineer of the Millville Mfg. Co. at Millville, N. J. Since leaving the Boston Elevated Railway in 1905 Bigelow has had interesting experiences in the following cities: Baltimore, Md., Jersey City, N. J., West Point, Ga., Boston, Mass., Stamford, Conn., St. Catharines, Ont., finally Millville, N. J. He reports that he has improved his conditions in each change.—F. C. Sheppard has recently been appointed engineer of construction for the Boston & Maine Railroad with headquarters in Boston. He has charge of all construction, new improvements and grade-crossing work over the entire system.—H. S. Webb is secretary of the Engineers' Society of Northeastern Pennsylvania with headquarters at Scranton, Pa. Webb, after graduation, served on the instruction force at Lehigh

University, which institution conferred on him the degree of M.S. in 1898. For the last thirteen years he has been kept busy writing, revising and editing text-books and supervising correction of students' lessons in telephony, telegraphy, electricity, magnetism and electrical engineering subjects in connection with the International Correspondence School. Webb has also become a Master Mason, a 32d degree Mason and a Shriner.—John L. Harris is now manager of the Hancock Consolidated Mining Company at Hancock, Mich. After being actively associated for years with the operation of the Quincy Mine, he undertook, six years ago, the development of the adjoining Hancock. They have just completed the sinking of a vertical shaft bottomed at 4,000 feet and lateral development is now in progress.—R. H. Sweetser read a paper at the Cleveland meeting of the American Institute of Engineers in October, subject "Blowing in a Blast Furnace." Sweetser is superintendent of the blast furnace of the Columbus Iron & Steel Co. at Cleveland, Ohio.—Charles H. Chase writes:

I have a letter from Beal dated at San Francisco December 26, 1912, in which he states that he is on the way to Japan, leaving the next day on the Pacific Mail Line, S.S. *Korea*, making a trip of about four months duration. In the course of business in the last few years he has visited a chain of factories scattered over the States and interests in Rugby, England, Paris, Berlin and Mexico.

1893

FREDERIC H. FAY, *Sec.*, 60 City Hall, Boston, Mass.

FREDERIC H. KEYES, *Asst. Sec.*, 739 Boylston Street, Boston, Mass.

The twentieth anniversary of the class is to be celebrated by a four days' outing, June 14-17, at the Hartford Yacht Club, Saybrook, Conn., at the mouth of the Connecticut River. This club is situated at one of the most charming points on Long Island Sound, and as it is close to the N. Y., N. H. & H. R. R. Shore Line, about half way between New York and Boston, it is easily accessible from both cities. The class will have the exclusive use of the commodious and well-appointed club house; the chef, who is an artist in his line, will offer *ménus* which will tempt the most fastidious; and for out door sports opportunity is offered for golf, tennis, baseball, swimming, boating and fishing. Saturday, June 14, will be *the* night when the annual dinner will be held, to be followed by appropriate chapel services on Sunday (as well as all the other days). For full information see the class notices.—At the Tech reunion in New York last January, '93 ranked second in attendance at the class luncheon which was held at the Railroad Club with thirty-five members present. Twenty-eight attended the banquet at the Plaza where personal greetings were extended to our honorary member, Dr. Pritchett. In all,

thirty-eight men turned out for the reunion as follows: Andrews, Ashton, Balch, Barton, Bemis, Blood, Boyd, Braman, Blake, Buck, Buchholz, E. B. Carney, Cook, Darrow, Dawes, Densmore, A. G. Davis, J. A. Emery, Farwell, Fay, Glidden, Hinckley, D. D. Jackson, Latey, Latham, Lord, G. E. Merrill, B. M. Mitchell, C. F. Morse, H. A. Morss, Norton, W. B. Page, Phinney, Spofford, A. C. Thomas, P. H. Thomas, Whiston, Yorke.—Letters from Toross H. Torossian of Lome, Bulgaria, to a member of the class Fund committee are of interest in shedding light on the present Balkan situation, as well as showing the loyalty of an Armenian Tech man whose life, since leaving the Institute, has been spent in the Far East. The first letter is dated December 25, 1912, and is as follows:

"I have duly received your letter of the 14th of last month and am enclosing you herewith the subscription card which you sent me. I am sorry I am unable to give a bigger sum. About twelve years ago, in northern Persia, where I was engaged in road building, I came indeed quite close to a substantial success. For lack of moral elasticity, rather than for any thing else, it could not be realized. Six years ago I returned to this country and am municipal engineer of this city since 1909 with a modest salary. Last summer I went to Constantinople and was going to be engaged by the Turkish government with a higher pay. The city, which I had seen last in 1887, had not made a perceptible progress in the meanwhile. That impressed me unfavorably. At the same time, from information which I gathered, I saw that the new (constitutional) régime was a sham, and the political condition of the country was unstable. I finally thought it wise to decline the offer.

"I have not suffered directly from the Balkan war. The personnel of my bureau here all going to the front, I am attending to business all alone. Doubtless you know already from the daily newspapers that the Allied States, among them Bulgaria, gave the Turk a hard spanking. The experiment of the young Turks some four years ago seems to have entirely failed. They were insincere and tried to place the new wine (European culture) in old and worn-out bags. The fact is that the Mohammedan religion is a *static* institution, openly antagonistic to all change and progress. It will prove always the unsurmountable obstacle to the regeneration of that race.

"The Turkish Empire exists on tolerance on the part of Europe. It is thanks to the European antagonistic interests that she has dragged her existence for so many centuries. To use a mechanical expression Turkey is a *resultant* in the *force polygon* of the European Powers, not a component force by itself.

"As the result of this war large territories have soon to be annexed to our small and young kingdom, and for many, many

years to come the engineer will have to play the leading rôle in the modernization of them.

"I hope the amount of the Fund subscribed by the alumni for the New Tech will finally reach one million dollars. It is surprising how small a percentage of the graduates have thus far responded. I remember to have noticed somewhere that the Institute receives from each student, in the shape of tuition fees, about one hundred dollars less than the amount which she actually spends in giving him his technical training. If all the graduates sufficiently appreciated this fact (of course I am speaking for those who financially are in a condition to do so) I am sure all the money needed to make the New Tech the first in the world will be forthcoming."

In another letter, dated January 3, 1913, Torossian continues:

"The Eastern question, which has disturbed the peace of Europe so often in the course of the last hundred years, seems to be near its natural solution. Peace once secured, the Balkan Peninsula will keep quiet, at least for a generation to come; and it is not unlikely that the Turks, in order to save the rest of their empire in Asia Minor, will finally adopt European civilization and culture after the fashion of the Japanese. These primitive countries, endowed with a unique geographical position, excellent climate, fertile soil and boundless mineral wealth will soon attract large foreign capital. I presume American capital also will participate in their material development. I must add the moral awakening of these countries is due to a considerable extent to American missionary efforts."

Replying to an acknowledgement from the class committee man, Torossian writes again saying:

"I have no objection to my letters being published and shall be very glad indeed if my arguments can diminish to any extent the rolling friction of a few more dollars on their way to the Alumni Fund. . . . I am sure the amount raised thus far can be doubled if every Tech man was made to realize his moral obligation to participate in the subscription. The sacrifice required is not great. His due share of the burden is not disproportionate to his capacity. For after all, a Tech man can be, and is always, qualified as a mighty (M. I. T.) man."

—James A. Boyd, who for many years has been connected with Westinghouse, Church, Kerr & Co., 10 Bridge Street, New York, in various capacities, and for some years past as consulting mechanical engineer, has just been promoted to the position of chief engineer of the company.—J. W. Ellms of Cincinnati has opened an office as a consulting sanitary engineer as noted in the following item which recently appeared in the *Engineering Record*:

Messrs. S. G. Pollard and J. W. Ellms have opened an office in the Miles Greenwood Building, Cincinnati, Ohio, as consulting hydraulic and sanitary engineers. Special attention will be given to engineering and sanitary investigations of public

water supplies, the appraisement of waterworks properties, and the design and operation of pumping and filtration plants. Mr. Pollard was graduated in mechanical engineering from Cornell University 21 years ago. For many years he was with the Holly Manufacturing Company, eventually being in charge of the shops at Lockport, and upon their removal to Buffalo he was made assistant superintendent of the combined shops of this company and the Snow Steam Pump Works. As mechanical engineer for the commissioners of waterworks of Cincinnati he was active in the later design and construction of the new plant. Upon its completion Mr. Pollard was made superintendent. Mr. Ellms received his technical education at the Massachusetts Institute of Technology. For the past twenty years he has been actively engaged in research work relating to water purification. For three years he was assistant chemist for the Massachusetts State Board of Health. In 1897 he became chemist for the Brooklyn Health Department and, with an associate, conducted a sanitary survey of the Brooklyn water supply. Mr. Ellms was one of the staff of experts who carried through the important investigations at Louisville and Cincinnati which established the rapid or American system of sand filtration upon a scientific basis. He was in charge of the engineering laboratory of the commissioners of waterworks during the construction of the new waterworks of Cincinnati, and there conducted a large amount of experimental and engineering work relating to filter design, construction and operation. For the past five years he has been superintendent of the Cincinnati Water Purification Works, which position he still retains, devoting only a part of his time to it, the remainder being given to consulting work.

—The engagement of Frederic Hall Harvey to Miss Anna Miller Wood is announced in the following item which appeared recently in the *Boston Post*:

The climax of a transcontinental romance will occur next June when Miss Anna Miller Wood of 112 Newbury Street, one of the foremost contralto concert soloists of Boston, weds Frederic Hall Harvey, M. I. T. '93, millionaire ranch owner and engineer of Galt, Cal.

Miss Wood was first brought to Boston by Arthur Foote, who heard her sing in London at a drawing-room concert while she was on her first European tour. He immediately engaged her to come to this city, where she made her debut with the Kneisel Quartet and later became soloist at the First Unitarian Church. She spent her summers touring the West and on the Pacific coast, where she had a large class.

It was during one of these tours that Mr. Harvey heard her sing and became acquainted with her. When Miss Wood decided to make her permanent headquarters in Boston Mr. Harvey followed her across the country and became a student at Tech, where he was graduated in 1893.

Miss Wood is a Californian and yesterday it became known that her wedding will take place at her home in Berkeley next June. She will then give up singing and teaching except for a few private concerts and will live on the big Harvey ranch.

—George M. Yorke, M. Inst. E. E., engineer of the Western Union Telegraph Company, has been appointed superintendent of plant. Since graduating from the Institute in 1893, Yorke has been connected with the American Telephone & Telegraph Co., up to the time of the absorption by that company of the Western Union.

The following address changes of '93 men have recently been received: Minard T. Barbour, 600 West Jackson Boulevard, Chicago, Ill.—E. S. Baumann, 1750 North Clark Avenue, Lincoln Park Station, Chicago, Ill.—C. E. Best, care J. D. Best & Co., Denver, Colo.—T. Morris Brown, 17 Gramercy Park, New York, N. Y.—Thomas C. Clarke, 701 Delaware Avenue, South Bethlehem,

Pa.—Nathaniel R. Craighill, 111-117 West 104th Street, New York, N. Y.—C. D. Gilchrist, care W. T. Grant Company, Waterbury, Conn.—G. T. Hanchett, 3 West 61st Street, New York, N. Y.—Harry N. Latey, General Electric Company, 30 Church Street, New York, N. Y.—George E. Merrill, 7 Trinity Place, Montclair, N. J.—S. Edgar Whittaker, 180 Albert Avenue, Edgewood, R. I.—William W. Peabody, White Plains, N. Y.—D. F. Potter, Robertson Cataract Company, 37-39 Court Street, Buffalo, N. Y.

1894.

S. C. PRESCOTT, *Sec.*, Mass. Inst. of Tech., Boston, Mass.

It was a matter of very great regret to the secretary that he was unable to attend the New York reunion and therefore that he cannot give a full account of the various festivities so far as they concerned the class. Those who were present will undoubtedly remember the occasion with much pleasure. I am informed by King that there were fourteen or fifteen men present at the different functions during the reunion. The secretary feels it incumbent upon him to say that about two or three weeks before the reunion a circular letter was prepared and printed for distribution to all members of the class urging their interest and attendance if possible, but owing to an unfortunate circumstance the letter was not sent. In view of this the attendance at the reunion was perhaps as great as could be expected, especially as '94 is not numerically strong in New York. The class undoubtedly feels the honor which has been conferred upon our distinguished fellow-classman, King, in being selected as the first president of the Technology Clubs Associated and also in being the first vice-president of the Alumni Association.

The inability of the secretary to attend the New York meeting was due to the necessity of his taking the vacation period for a brief trip to Costa Rica where some matters of a professional nature were engaging his attention. This provided him a second opportunity to see the Canal and while the time spent there was very brief, it was amply repaying. His only regret is that he was unable to meet any of the Institute men who are engaged on the work, although on the way down he encountered a Tech man bound for Bolivia, and in Costa Rica ran across an old student of the class of 1904.—Report has been current that the American plant of the Regenerating Rubber Company, of which Price is the president and chief owner, has been sold to the United States Rubber Company at a large figure. This report is especially pleasing to Price's friends as they are all unanimous in the belief that the highest type of success both financial and otherwise should be his.—Gardner sailed on Saturday, March 15, for Europe accompanied by Mrs. Gardner and his older son. He expects to

remain abroad during the greater part of the summer returning in time to take up his work again at the Institute in September. His particular mission is a most important one, namely, to look over the ground with reference to the selection of a successor to the lamented Prof. Despradelle.—Schiertz has been recently interested in a manganese proposition in Virginia but decided that it was not a matter that was worth his continued attention so has been in Boston for a few weeks past, as has also Batcheller who is engaged in some investigation work at the Institute.—L. K. Davis has left Boston and is now associated with the Columbia Inspection Bureau with an office at 425 Walnut Street, Philadelphia. A recent report locates Frank Drake in Boston, although the secretary has not seen him nor has he been able to locate him very definitely. An attempt will be made to do so, however, within a very short time.—Tidd, who is engaged on the New York water supply, sends his address as 10 Oakwood Avenue, White Plains, N. Y.—T. Varney has also forwarded a new address which is 103 Meadow Road, Edgeworth, Pa.—Zimmerman has his architectural office at 11 East 24th Street, New York City.—If any members of the class are interested in the rejuvenation of abandoned farms they should certainly get in communication with Swanton who has written to the secretary most entertainingly of his experiences of building up such a farm in Westport, Me. It is very evident from Swanton's letter that a Tech education finds ample application in the problems of agriculture and he is using the most improved and up-to-date methods in his treatment of soils, crops, etc. Altogether it seems as if Swanton should be called the David Grayson of '94. During the past winter he has been engaged in professional work, mechanical engineering, in the Bath Iron Works, but with the advent of spring returns to his island home in Westport and resumes his real professional work which is that of scientific farmer. If others of the class would write in regard to their doings as Swanton has done there would, the secretary thinks, be little ground for complaint as to the scarcity of '94 notes. The secretary would gladly increase the news from the class but to write individual letters to all the members is obviously out of the question and has not been particularly fruitful of results when tried. He would suggest the habit of sending an occasional postcard with items of interest, either about the sender or some other member of the class, as has been done in a few instances by Mackay, McKibben, Sayward and one or two others.—As next year is the 20th anniversary of '94 and as the next big reunion has been postponed until 1915, the question may properly be debated as to whether we might not postpone any large celebration until that time. The secretary will shortly send out a circular letter calling for expressions of opinion on this subject. Meantime he hopes that the members of the class will give it some thought and

will be free to send their opinions on the matter. Whether we have a reunion in '14 or '15 we ought to have at least seventy-five men present. Keep the matter in mind.

1895.

WILLIAM H. WINKLEY, *Sec.*, 44 Kilby Street, Boston, Mass.

The class luncheon held in connection with the reunion at New York in January was attended by members from Boston and Taunton, Mass., Providence, R. I., Albany and Rochester, N. Y., South Bend, Ind. and Moncton, N. B., in addition to a large delegation from New York City. Through the thoughtfulness of E. H. Huxley, the courtesies of the Hardware Club, No. 253 Broadway, were extended to the class, and twenty-six enthusiastic members sat down together at one o'clock, Saturday the 18th. After satisfying the inner man an informal meeting was held with Andrew D. Fuller in the chair and plans for holding a grand reunion of the class on its twentieth anniversary were discussed at length. Several suggestions were offered, the most original being a trip to Bermuda, and another providing a visit to the summer school camp of the Institute in Maine was favorably received.—The following motions were passed and have been ratified by the president and secretary-treasurer, and entered in the class records: Voted that a grand reunion of the class be held on its twentieth anniversary in 1915, and that a voluntary assessment of \$2.00 be levied now on all members of the class to form a guarantee fund, same to be collected now and placed in the hands of the class treasurer to be expended under the direction of the '95 Twentieth Reunion committee; a committee of five to be appointed by the chair. It was further voted that the executive committee of the Alumni Association be requested to stamp on their annual bills for dues to members of the class of '95 the following: "20th Reunion, '95 Guarantee Fund, \$2.00." and be authorized to collect same, and pay to the treasurer of the class of '95. It was voted that the class supply a stamp or separate card insert where no association bill was sent to an alumnus, and pay for any extra clerical service involved to the association, the object being to save expense, but principally to try out the idea that it would be more satisfactory to an alumnus to send a check to include his annual dues to the M. I. T. A. A., the REVIEW and the twentieth Reunion Guarantee Fund than separate checks of one or two dollars each. It was voted that the Twentieth reunion committee select, provide for and carry out a reunion at some suitable time and place, offering a pleasant trip and favorable opportunity for several days' life together. Said committee to report its progress from time to time. It was voted that the above motions be ratified by the class officers, or by a regularly called meeting if necessary. After the

meeting the members adjourned to the Hotel Plaza for the Tech banquet. Those present at the meeting were: Ralph R. Lawrence, Boston; F. A. Park, New York; J. A. Gurd, New York; H. E. Davis, New York; Arthur L. Canfield, New York; Charles F. Tillinghast, Providence; Francis W. Belknap, New York; John Dyer, Jr., Albany, N. Y.; William B. Claflin, New York; C. R. Wray, Rochester, N. Y.; Prof. H. K. Barrows, Boston; George A. Cutter, Taunton, Mass.; Azel Ames, New York; B. C. Donham, New York; P. H. Blodgett, New York; W. J. Rickey, Scotland, John T. Reid McManus, Moncton, N. B.; John H. Gregory, New York City; Frank C. Schmitz, New York City; Gerard Swope, New York City; F. T. Miller, Boston; T. H. Wiggan, New York; Frank A. Bourne, Boston; J. W. Thomas, New York; E. H. Huxley, New York; Andrew D. Fuller, Boston.

We hear from Parker H. Kemble through the *Electrical World* as follows;

Mr. Parker H. Kemble has resigned the position of general sales manager of the Toronto (Ont.) Electric Light Company to accept that of manager of the commercial department of the Union Gas & Electric Company of Cincinnati, Ohio. Prior to going to Toronto, Mr. Kemble was district manager of the Edison Electric Illuminating Company of Brooklyn, but his central-station experience has not been limited to these two companies. He was at one time connected with the engineering staff of the Boston Elevated Railroad Company and also rebuilt and operated the properties of the Northern Connecticut Light & Power Company of Windsor Locks, Conn. Mr. Kemble is a member of numerous engineering societies and was recently elected first vice-president of the Canadian Electrical Association and appointed Jovian Statesman for Ontario. He was educated at Harvard, at the Technology School in Dresden, Germany, and at the Massachusetts Institute of Technology.

1896.

CHARLES E. LOCKE, *Sec.*, Mass. Inst. of Tech., Boston, Mass.
J. ARNOLD ROCKWELL, *Asst. Sec.*, 24 Garden Street, Cambridge
Mass.

"Johnnie" Putnam who for the past sixteen years has been in the telephone business in the Middle West has joined the banking organization of Kennett Cowan & Co., of New York and Chicago. He will make his headquarters in Chicago.—Sturm reports from Chicago that Putnam is making his presence known in the "Windy City," and in spite of his tremendous gain in weight is still of the opinion that he can do a mile in faster time than Wayne. Sturm is kept busy in his special line of architectural design for hospitals, sanatoria, and institutions. Just now he is working on a large hospital in Persia, one in Shanghai, China, and one for Yeng Byen, Corea.—Wayne called on the secretary on January 29. He had been in attendance at the reunion in New York, and felt it his duty to come over and report to the secretary the good time that he had had, and incidentally, to tell the secretary what he thought of him for not having been

present in New York.—The Associated Geological Engineers, managed by M. L. Fuller, '96, and Frederick G. Clapp, '01, secured early last summer from the Canadian Department of Mines a contract to investigate all the petroleum and natural gas fields throughout the Dominion. The results are to be submitted in the near future for publication as a Government report. This company has also expanded its business to include a new department devoted to examinations and reports connected with the mining and treatment of ores. This department is in charge of Mr. C. T. Griswold, professor of mining at Carnegie Institute of Technology. His headquarters will be at the Pittsburgh office.—Hersey has been reelected secretary of the Wellesley Water and Municipal Light Commission. This makes his third term having previously served two terms of three years each. It is interesting to note that this commission consists of three men, all Tech graduates; one of them being Prof. Fuller of the mechanical engineering department. Hersey has recently spent ten days in the White Mountains on the Appalachian Club tour. His companion during this trip was Samuel P. Hunt, of Manchester, N. H., who although a member of the class of '95, will be recalled by some of the members of '96. Hersey's latest addition to his possessions is a boy who came into his family by adoption.—The *Boston Sunday Herald* of February 16, contained an announcement of the presence of Mary Antin as guest of honor at the dinner of the women affiliated with the Progressive Party of Massachusetts. A short account of her life was given. This is of especial interest to '96 men, because Mary Antin is the pen name of the wife of A. W. Grabau of the geological course in '96, and at present professor in the geological department at Columbia.—Charlie Hyde has been appointed by the Federal Government as a member of the commission of scientists to establish a standard of purity in water.—The New York reunion is over, and the secretary was unable to be present. Through the kindness of Charlie Lawrence, who worked long and hard toward getting a bunch of '96 men together for the reunion, the secretary is able to present the following account of it: (Incidentally, the secretary might add a fact that Lawrence has not mentioned; namely, the failure of many men of the class to pay any attention to a personal letter. The secretary having held office for some years now, has become hardened to this treatment; but when a new man like Lawrence undertakes to arouse enthusiasm and starts correspondence, this non-responsive attitude of the men results in a sad realization on his part of the carelessness, to speak of it mildly, of many of the fellows.)—At the request of Mr. George F. Sever, and at the urgent solicitation of Ben Hurd, the writer undertook the duties attending the office of class booster, in connection with the late reunion in New York City. As an assistant in this work, T. I. Jones was assigned

to take care of the men in and around New York City, from which number was to be drawn the nucleus of our gathering. Every member of the class of '96, whether living in the States or abroad, had a direct communication mailed him from some member of his class, soliciting his attendance at the class luncheon. Several received two, and some three communications, where they exhibited a disinclination to attend the function, or a half-hearted interest in same, with the result that some who actually refused in the first instance were later induced to change their minds and join their classmates in this celebration. It was up to the class of '96 to go after one or both cups offered as prizes by the committee in charge,—one for the number attending the class luncheon, and the second for the former student travelling the greatest distance.—We were considerably exercised over the receipt of a communication from A. F. Lindenlaub, stating that he would be here in time to attend the luncheon and banquet, coming all the way from Chemnitz, Germany, but, unfortunately, Lindenlaub started too late and traveled the wrong way, coming west, a distance of only 4,500 miles, where he might have traveled east, going a distance of 20,000 miles, thus clinching our claim on cup No. 2; but we learned from Lindenlaub that the reason for his not doing this was because he did not think it necessary, as he could not foresee the possibility of a resident of Melbourne, Australia, traveling half way around the world to join his classmates. At the luncheon there were thirty-one members of the class of '96, three failing, at the very last moment, to attend, due to illness or some other cause,—Fisk, Tilley and Cummings, and one failing through a force of circumstances over which she had no control. The '96 class luncheon was held at the University Club of New York, and it appears to be a hard and fast rule of the club that no women be admitted to that building, under any conditions, at any time; because of which Miss Mary E. Dann was not permitted to join her classmates, though she wished and endeavored so to do. The class properly voted that a letter of regret be sent to Miss Dann by the class marshal, which was done, and the same was subsequently acknowledged, with full appreciation, by Miss Dann. Had we attained to the number thirty-five, however, we would still have fallen short of cup No. 1, for that busy class of '98, with its far famed activity and enthusiasm, was not to be beaten by so small an attendance as thirty-five, they reaching the high mark of forty-four, while the class of '93, which is always worthy of being watched carefully in contests of this sort, caused the class of '96 to feel that they were outdone by an older class, with smaller ranks whereon to call, they numbering thirty-seven or thirty-eight. Upon assembling at the University Club, where we had the good fortune to lunch because of the kindly offices of Ben Hurd, he being a member of that club, the thirty-one men drank a toast to the class of

'96, and gave a rousing good cheer. During the progress of the lunch, letters were read from several of those who were so unfortunate as not to be with us,—this refers particularly to Johnny Rockwell, Joe Stickney, Guy Morrill, I. S. Merrill, Marshall Leighton and Louis T. Cannon. Cannon wrote from Salt Lake City, stating that, while it was impossible for him and others in the neighborhood to attend their class reunion, they had arranged to get together on the same day, so that, while part of their class was assembled in New York City, another part had a gathering in Salt Lake City at the same time. This certainly speaks well for Salt Lake City, and the class of '96 has occasion to be proud of its members who, while absent in body, were at least able to attend the reunion in spirit. Of those attending, the most conspicuous was, probably, Conny Young, but Young is always conspicuous. He is like the cork ball that you endeavor to sink in a pail of water,—it always bobs up on top; but we like to see Young on top, for he tells a good story and keeps his listeners in good humor.—Freddie Fuller was with us, wearing his genial smile, but seemed to be lacking in that Harry Fisk was not at his side.—Maclachlan came down from Boston at the last minute, and did the class booster the justice to state that he would not have done so but for the receipt of a final letter taking him to task, and showing him where his duty lay. Good for Maclachlan! He is made of the right stuff.—P. W. Litchfield came from Akron, Ohio, who, with Bragg, from Ann Arbor, Mich., and Guy Wall, from Indianapolis, did much to embarrass those living within two hundred miles of New York who failed to put in an appearance.—F. H. Walker put aside his business cares for sufficient time to renew his acquaintance with Bert Thompson, who came down from Lowell.—C. A. Wentworth was the only man who came up from Philadelphia; but then Philadelphia is so far away, and Wentworth is certainly to be commended.—The man who surprised us was L. K. Sager. Sager's time is worth just exactly ten dollars a minute, and he was with us nearly three hours.—Indianapolis was certainly well represented, as it sent a large body to this gathering. Those who have not seen James Lloyd Wayne recently will be glad to learn that he is not growing thinner. He and Guy Wall held up the Indianapolis end very well, though at the ring side they would not qualify in the same class.—Charles H. Hall and Russell T. Starr were amongst their classmates, perhaps for the first time since their graduate days. This is certainly true in the case of Starr, and he had an experience which we trust will lead him to resolve never to be absent from any future function of this sort; and he expressed himself later as being greatly pleased at having had the opportunity thus to renew old acquaintances and to mingle on such pleasant terms, even with those with whom he was not so well acquainted at the Institute. This spirit is

exhibited by everyone attending functions of this nature, and is all sufficient to guarantee the success of future undertakings along similar lines; but it remains for those in charge to get the men out for their first experience, and in this only lies the difficulty.—Charlie Trout came all the way from Staten Island, braving the dangers of the New York Harbor to do so, while Clark Holbrook came in from Red Bank, N. J., and Albert Ruckgaber was prevailed upon to leave his natal borough of Brooklyn for the once and face the dangers that are ever present on the Island of Manhattan, for those accustomed only to Brooklyn.—Joe Driscoll came down from Brookline, Mass., and H. W. Hayward from Newton Centre, so that New England was well represented, though considerable regret was expressed at the absence of our genial secretary, whom it was proposed by one of the class, we should fine five dollars. It was shown by two members present that they had been fined a similar amount by the secretary for failing to appear at the class reunion held in 1911, on our fifteenth anniversary, and the contention was made that the same should hold good in this celebration, which, in the absence of any votes to the contrary, seems to establish the fact that the secretary is so fined, and he may use this money as he sees fit, in the interests of the class.—S. D. Crane caused a suspension of the telephone service in Newark, N. J., by absenting himself from his duties for the time being, and mingling again with the good friends he made so many years ago; and Frederick Schaller permitted himself to be prevailed upon to leave the Hall Signal Company to its fate while he indulged similarly.—Henry Gardner permitted the New York Central Railroad to run wild for a period of a few hours, as he decided that his classmates deserved first consideration. Fortunately, no great mishap occurred during this unguarded interval.—J. E. Woodwell was there with part of the hair he used to brush so carefully when a student; but it is up to Woodwell to read some of the various ads. which offer to assist those similarly afflicted, or soon it will be “too late for herpicide.” Everybody was glad to see Woodwell.—Frank McCann didn’t seem to care a snap whether the future youth of New York City were educated or not. He meant to have a good time with his classmates, and, judging from the merry whirl of conversation, he succeeded.—Harold Stevens, who is generally there when his class calls him, was once more numbered amongst those present, and, judging from his hearty handshake and genial smile, he was glad to be there.—G. C. Hall who bears the burden of transporting New York’s population to and from its place of business, though he bears his burden lightly, was able to shift the responsibility for sufficient time to spend a few hours with his colleagues.—Bradley Stoughton is an old reliable, and the class of ’96 would be extremely lucky did it have a few more Bradley Stoughtons.—H. P. C. Browne, who makes about as much noise as a hickory

nut, was with us, shouting and talking in such a manner that would make a deaf and dumb institute ashamed of itself; but Harry Browne has the faculty of making and greeting friends without the use of a megaphone. Goodness knows what he would do if he talked as much as some of the rest of us.—T. I. Jones threw a scare into his classmates by not appearing on time, and it looked as though we were going to have our luncheon without him, when, at the last minute, he burst into the room like a cyclone, and stayed our fears; but Jones always did work like a cyclone, or he wouldn't work at all.—The class of '96 must not lose sight of the fact that, while great credit is due to others for the success of the recent reunion, and for the organization of the Technology Clubs Associated, much credit is due to one of its members for the success of this undertaking, and in great measure, for its conception. While the class was anxious to give due recognition of this fact, it was held in check with difficulty at the banquet, to permit others an opportunity to avail themselves of the privilege of giving credit where credit was due; and, much to the satisfaction of his classmates, the final cheer which was led from the speakers' table was given for Ben Hurd. Thus closed the reunion of 1913, and those attending same, while regretting that it has come to a close, expressed a resolution not to be missing when the reunion of 1914 is called in Chicago.

New addresses have been received as follows:

George L. Blakeslee, U. S. Reclamation Service, Powell, Wyo.—Mrs. Paul G. Burton, 701 Lake Drive, Baltimore, Md.—W. E. Spencer Deming, 47 Dearborn Street, Roxbury, Mass.—William T. Dorrance, East Boston Terminal Railroad, 16 State Street, Boston, Mass.—James Eaton, 457 Main Street, Burlington, Vt.—George L. Farley, Superintendent of Schools, Brockton, Mass.—Frederick E. Field, Filtration Works, City of Montreal, Quebec.—Charles E. Foss, care of C. B. Coburn Company, Lowell, Mass.—N. C. Grover, Bowdoin College, Brunswick, Maine.—Stanley Howland, Asheville, N. C.—Homer P. Ingell, General Electric Company, West Lynn, Mass.—Miss Rebecca Kite, West Roxbury High School, Jamaica Plain, Mass.—Michael V. Lahey, 4207 College Avenue, St. Louis, Mo.—Leebert L. Lamborn, Congers, Rockland County, N. Y.—Irving S. Merrell, 524 West Onondaga Street, Syracuse, N. Y.—Rev. Guy L. Morrill, Canandaigua, N. Y.—Pierre E. Richards, 46 Holburn Viaduct, London, Eng.—Mrs. George W. Rolfe (Mabel Parker), 344 Brookline Street, Cambridge, Mass.—George E. Stratton, Box 651 Glasgow, Mont.—F. A. Thanisch, Box 105, Florence, Ariz.—Charles W. Tucker, 144 Mill Road, North Andover, Mass.—

1897.

JOHN ARTHUR COLLINS, JR. *Sec.*, 67 Thorndyke Street, Lawrence, Mass.

Ninety-seven was well represented at the various events here during the alumni reunion in New York City. Great credit is due the committee who made strenuous efforts to get the men out and with good success, as the list below will show. At the luncheon on January 18 held at the Engineers Club, there were twenty-three men present as follows: Spear, Ilsley, Ferris, Atwood, Hosford, McCarthy, Binley, Jos. Bancroft, Bradlee, Hopkins, Motch, Hamilton, Howes, Jennings, Hering, Humphreys, Baker, Blood, Brown, W. D., Daniell, Gaillard, Grover and Worcester. The majority of these men were also at the formal banquet held in the evening.—The January reunion of those of the class in and around Boston was held at the City Club, Boston. Thirteen men were present at the dinner, as follows: Bradlee, Breed, E. P. Bliss, A. W. Jackson, H. D. Jackson, Leonard, Olin, Vinal, W. O. Sawtelle, Fuller, Hammond, Worcester, and Lamb. After dinner all adjourned to Keith's Theater, and passed judgment on the various phases of drama there exhibited.—At the February meeting of the executive committee held at the Engineers Club in Boston, the members discussed the advisability of issuing some form of a class book. The general idea was to have this book give an account of the fifteenth anniversary and reunion at Osterville in 1912, and also the names of all members of the class, the various positions held by them in chronological order since graduation, marriages, children, books and important papers published, and any matters of interest to the class. Very soon some form of circular letter will be sent out, outlining the plans in detail.—The secretary here wishes to state several facts, the results of his several attempts to issue a class book. Such a book, if it is to be worth the while, should give a correct account of the majority of men. And this data, as a rule, can only come from the men themselves. It will surely not look well to see after many of the names, the words, "no reply," or some other phrase indicating failure to coöperate. In times past when less than fifty per cent. of the men failed to reply and even these replies spread over a year's interval, one can see the uselessness of trying to get out a publication. Such work is costly, often being \$2 a page, but if complete it has an historical and statistical value that is high. So, whatever the executive committee decide to do, let every man in the class do his part and do it promptly.

1898.

ERNEST F. RUSS, *Sec.*, 68 High Street, Boston, Mass.

The important event to all men since the last issue of the *REVIEW* was the reunion in New York. This reunion was a particularly

happy one for our class, and owing to the excellent work of the New York contingent, headed by Gardner and Wilder, our class was fortunate in securing the cup for having the largest number of members present at the class luncheon. This affair was held at the Aldine Club and the following men were present: D. C. Fenner, M. V. Ayres, Frank A. Spaulding, Walter A. Cleaveland, G. R. Wadsworth, Eugene W. Rutherford, William Brewster, Julius E. Nolte, G. R. Anthony, Horace T. Smith, Robert B. Wallace, H. L. Bodwell, K. W. Waterson, Ernest F. Russ, L. D. Gardner, Ralph R. Rumery, Hollis Godfrey, J. F. Muhlig, William W. Stevens, W. H. Tew, D. W. Edgerly, A. Sargent, Edw. M. Taylor, E. R. Barker, A. H. Jacoby, C.-E. A. Winslow, John H. House, Geo. E. Mathews, Van Rensselaer Lansingh, Chas. F. Wing, Jr., J. H. Sears, C. S. Koch, D. Q. Brown, O. H. Kaufman, Robert S. Allyn, B. B. Priest, Willard B. Nelson, Clifton W. Wilder, Paul McJenkin, Harry C. Ingalls, Fred H. Twombly, Seth K. Humphrey, Reginald Tobey, and Miss Usher. Guests: Davis R. Dewey, Henry E. Pearson, and A. W. Bates.—While the largest number present came from New York City and that locality, there were a few from Boston, although not so many as we hoped for, but others came from Pittsburgh, Cleveland and Detroit. We had as our guests, Professors Dewey, Bates and Pearson. After the dinner an informal discussion was held relative to the class reunion for our fifteenth celebration. It was decided that the secretary should make arrangements on the south shore at a comfortable place where we could enjoy all the outdoor sports, and have the best hotel accommodations. With that idea in mind we have secured the "Cotocheset" at Wianno, and will use their cottages, and if these are not sufficient in size, we can go into the large hotel. The plan is to go down from Boston over the road or by special car, according to the weather. We shall leave May 30 at about one o'clock, and the plan is to stay until Tuesday noon following. Arrangements have been made whereby men who do not feel that they can stay the entire length of time can go down any part of that time, and no doubt the largest number will be present over Sunday. Great things are being planned for this reunion; '98 has always done what they set out to do in the very best and most approved fashion. A large number of men from New York, in fact the majority of the men at the dinner, signified their intention of coming over to the reunion. Parties are being formed to come by automobile from distant parts. Very shortly now the class will be in receipt of numerous announcements relative to this reunion, and it is earnestly hoped that the committee in Boston will have the hearty support of all the men of '98 and make the affair the largest one of its kind that any Institute class has ever had.—Warren Ritchie, formerly with the Purdy Engineering Company in charge of a large hydro-electric development in Costa Rica, has opened an office in Petersburg, Va., as a consulting

engineer in hydro-electric and municipal engineering work. Mr. Ritchie has had charge of the surveys in Havana, Cuba, upon which the present sewerage system is based. He also made the preliminary surveys for the Jamestown Exposition.—Chapin is now with the W. C. Durfee Company, dealer in tartar, 514-16 Atlantic Avenue, Boston, and is engaged in special research into the physics and chemistry of dyeing.—The million-dollar suit of Harry E. Cilley, who has been fighting for the past ten years for a chance to get the United Shoe Machinery Company on trial before a jury in the United States District Court, has been aided by the legal talent of Everett N. Curtis, who has been with Mr. Cilley from the start in his fight. Curtis was graduated from the Boston University Law School with honors in '00, two years after leaving the Institute. "The Sherman Law is," to quote the *Boston Post*, "perhaps the most confusing to the legal profession of any law now on the statute books. Ever since its passage, both the government and corporations have been grappling with it. At present it is believed the issues under it are now fairly distinct in the public mind. Mr. Curtis has had as his opponents during the past ten years the ablest legal talent in New England. He is now pitted in the fight against a man who is regarded as one of the most resourceful lawyers in the country, Charles F. Choate. The trial, it is believed, will be the greatest in Massachusetts, not only on account of the momentous questions involved, but because of the effect it is likely to have on one of the most important industries in New England today, the United Shoe Machinery Company. It is purely a New England fight, although its effects are likely to be country-wide and even international, as the same question as to what constitutes monopoly and restraint of trade has been raised against the company in Canada, where the outcome of the New England suit is awaited with interest."

1899.

W. MALCOLM CORSE, *Sec.*, care of Lumen Bearing Company,
Buffalo, N. Y.

The class dinner in conjunction with the Technology Clubs Associated was held at Browne's Chop House, 1424 Broadway, New York City, at 1 o'clock, January 18, 1913. It was the banner dinner of the class since graduation and much enthusiasm was manifest. It was decided to publish a class directory to be ready at the time of the fifteenth reunion of the class in 1914. It was suggested that the fifteenth class reunion be held during the early part of the summer of 1914, at a point near Boston, preferably situated where out-of-door sports could be enjoyed. If the club house proposed by the class of '85, to be erected on Lydia Island in Buzzards Bay, is available in 1914, it might be possible to secure it for the reunion. It would seem to be an ideal place, if it can be

secured. Let every man plan to spend three days of his vacation in 1914 with the class and make our fifteenth reunion one never to be forgotten.—H. J. Skinner resigned as secretary of the class, at a meeting held in Boston in December, 1912, and W. M. Corse was elected to fill the vacancy. The new secretary bespeaks the coöperation of every member of the class to make the class work a success, and urges every man to send in notes of interest so that our class notes in the *TECHNOLOGY REVIEW* may be as complete as possible. H. J. Skinner remains as our representative on the Alumni Council, so at the meetings in Boston, we will be represented.—F. C. Waddell announces the arrival in his family of Russel Briden Waddell, on February 5, 1913.—W. B. Flynn, who is connected with the organization of L. B. Stillwell, consulting electrical engineer, 100 Broadway, New York, is at present located at Siegfried, Pa.—Members of the class will be sorry to learn of the bereavement of L. W. Shumaker, whose wife died during the summer of 1912.—Frank F. Fowle has resigned his position as one of the joint editors of the *Electrical World*, and opened an office at 68 Maiden Lane, New York, to take up engineering work again. Prior to joining the *Electrical World*, a year ago, Fowle had maintained his own office in Chicago for four years and built up an active practice in the electrical field.—The following letter received from Ellery is certainly interesting. The secretary would be pleased to record many more from other men if they will send them in:

Your notice of the dinner received, but I shall not be able to attend, and it is also out of the question for me to try to go to the New York reunion. I have been in Erie three months. Since I left school I have been floating about the country so much, that I feel myself as though it would require two men and a boy to keep me located. Will start back a little and then come down to the present.

After knocking around for twelve years in open hearth mill work (and getting a good experience out of it too) I finally decided in the fall of 1910 to set this aside and take up some line of social work, since I have always been interested in social problems. Being then at Gary, Ind., I moved into Chicago, and January 2, 1911, I began going to school again—this time at the Chicago School of Civics. Will say that I had, during the fall, also become interested in single tax and had resolved to take up social work with this as a basis. I attended the school until June 1 and was glad I did so because it served to put me in touch with various social movements and those connected with them. In August, 1911, I began with the Illinois State Department of Factory Inspection. I was rated as chemist, but a better title would be chemical inspector. Was pleased to have this position because it gave me a chance to apply my chemistry as dealing with industrial poisons, effects on health, general working conditions in factories. Also it gave me an insight into state factory inspection systems, attitude of labor unions, etc., thus putting me distinctly in a line of social work. Meanwhile I became secretary of the Chicago Single Tax Club, and helped along in the work of "educating the people to demand the single tax." Although I enjoyed my experience with the factory department, there were some things developing that predicted trouble ahead. So last September when an offer was made to me to come to Erie, I accepted it. I resigned as inspector after about one year's service. The position I have here is that of chemist with the Erie Forge Company, a small concern, but yet doing quite a good business. The laboratory I found was not in very good shape, and I have been busy gradually bringing it into better condition. It is during the present month that I am com-

pelled to give it my whole attention, but by the end of the month I hope to have it running fairly well, although it will still take time to get things working to the best advantage. As for single tax I consider that to be the most important subject that any man can devote himself to, especially if he is a technically trained man. All sciences are founded upon truth and rational, logical reasoning. The single tax argument is simply political economy reduced to a science, and the reason so many college professors of political economy treat Henry George with contempt is because he has shown up clearly the weakness of *their* position, and because there is no satisfactory argument that they can bring against him.

I had single tax brought to my attention in 1910, and in the fall of that year I read "Progress and Poverty." I got no more than half way through the book on the first reading, when my idea of the whole social, industrial, and political situation was revolutionized in an instant, and I saw the solution of our problems clearly. I felt the full force of the Henry George argument. It is truth and it is founded upon justice. He has shown us the only way of getting at the conditions that confront us, and the solution is so simple and so practical, that the wonder is that people have not yet awakened to what is really going on, and made a change.

I might talk to you a week on this subject; as to what the single tax is and what its possibilities are, but briefly I will say that every graduate of M. I. T. should need only to read "Progress and Poverty" to become an ardent and earnest advocate of the principles of Henry George. The truth is there, and the minds of Tech men are such as are peculiarly able to comprehend the logic and force of what George says. I would not at all object if you should read this letter before those of the class who may be able to gather in Boston, or at least allude to the single tax as being something they should all look into, as believers in scientific analysis, progress, justice, and Christianity applied. "Single taxers" are the craziest bunch of lunatics you ever saw. They actually believe they know what causes poverty and what to do about it. I am giving talks on it, writing about it, and interesting people whenever and wherever I can, and I much regret that just now I must give attention quite strictly to laboratory work. Soon I hope to be better situated. It is some time since I saw you last, and when in Boston next time I will look you up. I enclose \$1.00 for class dues.

—The engagement is announced of Miss Isobel S. Bryan of Virginia, daughter of Mr. and Mrs. James R. Bryan, to Mr. Gerald M. Richmond of Providence, R. I.

1900.

INGERSOLL BOWDITCH.
WILLIAM R. HURD, 2D.

RICHARD WASTCOAT.
PERCY R. ZIEGLER.

N. J. NEALL, Sec., 12 Pearl St., Boston, Mass.

EDITOR'S NOTE:—We must have an editor's note this number because a new editor is on the job, and probably an explanation is due of how he comes there. Some others of you may be editors later; this is your precedent—if you need one.

The editors of the class news in the REVIEW are accustomed to use the third person, but this editor isn't going to be so modest. "I don't like to talk about myself, but"—it will be easier for me to say what I have to say if I use the pronoun "I" occasionally (?).

First, I will give the above mentioned explanation. I went down to New York for the big Tech reunion, January 17 and 18, and at the class luncheon told something about the different fellows I had seen in my wanderings. Neall asked me if I wouldn't help the

Boston crowd out by furnishing some news for the April REVIEW. I, of course, said I would be glad to do what I could, assuming that I would only have to write a letter.—Hopkins VI.

A few days ago there comes this letter from Neall:

If you would not consider it an imposition upon your interest in Tech matters to fulfill your promise of coöperation in the matter of the class of 1900 letter to the next issue of the TECHNOLOGY REVIEW, I should be greatly obliged to you for your assistance.

I have the feeling that you can make this letter of great interest as it will give you a different field from which to draw than ours. The letter is primarily intended to be representative of the class as a whole, and I have often wanted to make the experiment of its make-up in just this way.

Now we come to the real beginning. For the first time since 1896 I regret I didn't take Freshman English. Well, I am to tell of the fellows I have met, so I will go right back to the beginning. Tweedy was the first 1900 man I saw after leaving Tech. It was in a theater in San Francisco about July 1, 1901. I lost sight of him in the crowd coming out, so didn't get a chance to speak to him. About ten days later I saw Gerald Frink in Seattle. I was on my way East, and was taking an evening train on the Great Northern. Frink came down to see some friends off.

In the four years I was in Chicago, I saw very few 1900 men, Barton, Brooks, Jouett, Hapgood, A. S. Merrill and Leonard are all I can remember, and most of them I only saw once. Leonard came to Chicago just before I left for New York. I went to most of the Tech dinners in the winters of 1903-04 and 1904-05, only once or twice did I have anyone to assist me in giving the class yell, and you will all agree it takes a crowd to get up nerve enough to give that yell.

For the first three years in New York I lived with Keith. By the perverseness of fate, I am now called upon to edit an article giving some of Keith's recent life history. These are the extracts:—

The well-known engineering firm of McMeen & Miller which for the past ten years has existed as a partnership between Samuel G. McMeen and Kempster B. Miller, has been incorporated under the same name. The personnel of the new firm includes Mr. McMeen and Mr. Miller, the former partners, and as a new member, Mr. Leigh S. Keith, who for a number of years has been connected with the firm in the capacity of managing engineer.

The incorporation of this firm comes as a result of its constantly widening field of operations. The old partnership was established, primarily, to conduct a general telephone engineering and patent expert practice. Mr. McMeen and Mr. Miller were the first engineers to establish themselves in a general telephone engineering business, detached from all manufacturing and operating concerns. The scope of the concern has rapidly widened, so that the greater bulk of the work of the firm for a number of years has been in the line of construction, design, consultation and management in connection with properties in the railway, light and power fields, and investigations of public service corporations for private and municipal interests.

Mr. Leigh S. Keith, the secretary-treasurer of the new firm is a graduate of Massachusetts Institute of Technology. For a number of years after graduating, he was employed in the engineering department of the New York Telephone Company, the later years of this service being spent in the making of special investigations directly under the chief engineer. About four years ago, he entered the employ

of McMeen & Miller, and has been engaged in a wide variety of engineering work, particularly relating to public service investigations of light, power and telephone properties, and various special problems in the field of electric railway work, such as the location of substations, the design of feeder systems and the prevention of electrolysis. For the past three years, he has been managing engineer of the firm, so that in becoming one of the principals, the change involved is more of name than of function. The organization of the company has been increased so as to include a full corps of experienced engineers fitted in every way to handle properly not only the general work of a consulting engineering business, but, also, the more specialized details of economical and efficient design and construction of the steam or hydroelectric stations, high tension transmission lines, and overhead and underground distribution systems.

For the first two years or more I was in New York, I didn't attend any of the Tech meetings, but used to meet a 1900 man in the street occasionally. "Steve" Hall I saw quite often. Two years ago I joined the Technology club. Went there several times without seeing any 1900 men. In November, 1911, the club had a smoker which Morris, Thayer and I attended. Well, we had quite a reunion and enjoyed it so much that we decided to try and get some of the New York fellows together. We didn't do much until the annual dinner in January. Our efforts then, brought out five, Ellis, Blair, Thayer, Morris and myself. All five were in favor of having a class dinner, so Morris, Thayer and I got busy. Didn't get much encouragement at first, but we increased the number to thirteen. An account of this dinner appeared some months ago.

Last May I came out to Pittsburgh. There are three other 1900 men in the Pittsburgh district, Seaver, Badlam and Buffum.—Seaver is in the same building that I am, but I have seen him but once. He is a busy individual as the Harbison-Walker Refractories Company, of which he is chief engineer, has plants pretty much all over the country.—Badlam I ran into at the Tech smoker in January. He is assistant chief engineer of the new Pittsburgh Crucible Steel Company's Plant at Midland, Pa., in charge of the rolling mill department. Badlam carries that same old smile but minus the beard.—Buffum I have talked to over the 'phone but as he is away most of the time I haven't seen him yet. He has gone into the contracting business, is ready to build a power house from A to Z.

Down in Cincinnati I called on Rapp. He is busy and doing well. His work is quite varied, the design of residences as well as commercial buildings. His design of a machine shop in Cincinnati so pleased a big concern up in Wisconsin, that they called him in to design a new shop for them. That same evening while waiting for the dinner hour in the lobby of the Sinton, who should bob up but a few feet away but my old pal Homer Littlefield. He was some surprised. He shook the crowd he was with and haled me off to dinner. We enjoyed talking over the old days; train time for me came only too soon. A month or two later Littlefield,

Keith and I had lunch together in Columbus. Littlefield is manager of the General Electric Office in Columbus, five in the office besides himself. He is making a fine record there; increased the business in his territory last year way beyond what was expected.

In Cleveland I have called two or three times on Walker & Weeks, whom I had noticed were architects for several large buildings in and about that city. Much to my surprise I saw in the November REVIEW that Walker is a "1900" man. I called again a few days ago, thinking I might get an item for this news letter but Walker was out.

The reunion in New York in January was an occasion to be long remembered. There wasn't a man there that didn't come away from the department lunches and the general mass meeting without a greater pride in his alma mater. At the class luncheons old friendships were renewed and the loyalty to classes increased. "1900" has never had much class spirit but the eighteen who attended the class luncheon thoroughly enjoyed meeting one another, and many expressed a wish that we could have some "1900" reunions which a goodly number of the men would attend. As Atwood put it, "Why, the '1900' men are just as fine and prosperous a bunch of fellows as those of any other class. I have enjoyed this meeting immensely, let's have some more of them." Those at the luncheon were:—Barney, S. W. Jones, Jouett, Reimer, Thurber, Bowditch, Westcoat, Fitch, Jennings, Stone, Reardon, Hopkins, Hapgood, Manley, French, Thayer, Atwood, Neall.

The banquet came in the evening. Those present were Thurber, Bowditch, Stone, Reardon, Hopkins, Hapgood, Manley, Thayer, Atwood, Blair, Neall and A. S. Merrill. After all the other classes had given their yells one or more times, our crowd got up nerve enough to let out one of those "Boom-Rah's." Stone led the cheering. He stood on a chair so as to be seen. Ha!

Stone is still with the Board of Water Supply of New York City.—Suter is working for the State of New York on the Barge Canal, I believe. Suter did some great work while with the Board of Water Supply. Was responsible for a good part of the design of the inverted syphon under the Hudson River at Cornwall.—Hapgood is the inventor of a small motor-driven ice machine for attaching to refrigerators. It can be built in sizes as small as 75 to 100 pounds of ice per day. A company has been formed in which "Hap" has an interest, besides drawing a fat salary and a minimum royalty per year that is just as fat as the salary. "Hap" gave up the shoe business about a year ago.—Atwood is carrying on a very successful business as Eastern sales representative of the Kerr Turbine Company. I wanted Atwood to give us a description of his visit to Tweedy down in Mexico a year or so ago. I think I prefer even Pittsburgh to the place Tweedy was in. Maybe we can have Atwood as the next "editor."

Bert Hopeman is doing a big and prosperous contracting busi-

ness in Rochester, N. Y. Has constructed some of Rochester's big buildings. Bert has a summer home on the shore of Lake Ontario and recently bought a fine old residence in town. Bert's is one of the places I head for when I get a day or two off.

When coming out here last June, I ran into Carl Suhr on the sleeper. When I got up in the morning he was sitting in the seat opposite me. He got off at East Pittsburgh to inspect some electrical apparatus for the American Brass Company, of which he is mechanical engineer.—I saw Corliss a couple of years ago when calling on Winsor, chief engineer of the Boston Elevated. Corliss is Winsor's assistant.—S. P. Brown is in charge, I understand, of a ten million dollar job in Montreal. I intended to write and ask him for some word about the work, but have been too busy and the time too limited.—C. C. Brown is still in Philadelphia. We had dinner together about a year ago and while I waited for a train we bowled a few games of ten pins. You will never see either of us in championship matches.—The following is from Boston:

"An informal dinner of the class of 1900 was held at the Technology club, on Monday evening, February 17 and the following men were present: Beekman, Bowditch, Bugbee, Burnham, Cutting, Howe, Jennings, Neall, Reardon, Richardson, Walworth, Wedlock, Wentworth.

There was no special event planned for the evening, but after a very good dinner had been served a general discussion of the affairs of the class and of the Institute took place.

One of the questions asked was why the class of 1900, and in fact the alumni of the Institute had not responded more fully or more liberally to the appeal of the Fund Committee for contributions towards the general expenses of the buildings of the New Technology. One member of the class gave as his reason for not contributing, that he had not received a great deal of encouragement in his work from the professors, and he felt that the professors should take an interest in the work of the alumni.

Another member seemed to think that our class had reached the age where they were going to either make good in their life's work or stay in the position which they now held. Those in the former class needed all the money they had to make a success of their business, and those of the latter class needed all their money to live on.

The general opinions of the class seemed to be that the Fund Committee had made a mistake in asking for too much money and had not given the men encouragement in giving small sums. It is hoped that this mistake may be rectified in the next circular from the Alumni Fund Committee, by impressing upon the members of the class that it does not make much difference how small an amount they give, but it is important that every member should take a personal if not a financial interest in what is being done.

A letter has been received from one of the members of the class

who did not receive his class book. This member seemed to think that it was the fault of the committee, when it was really his own fault for not notifying the secretary of his change of address. It is very important that every member should notify the secretary of any change of address."

I see some of the Boston fellows have the same idea about the Alumni Fund subscription that I tried to bring out in my correspondence with Neall, some of which was published in the last REVIEW. Every man could afford to subscribe \$5.00 or \$1.00 per year. By doing so we could at least have the record of 100 per cent efficiency in numbers. Come on fellows, do it now.

Now, fellows, I want to suggest that we all plan to attend the big reunion in Boston in 1915. It is going to be the biggest affair Tech has had yet. The new buildings will be ready for inspection and it is our fifteenth anniversary besides. By 1915 we are going to have some real class spirit in "1900," and those of you who haven't felt the touch of it yet, want to come to get something that will give an added pleasure to life as the years go by. Remember the date.

The class will be interested to read the following letter from Mrs. Bender with respect to Lowry D. W. Bender's death:

It has been impossible for me to comply before this with your requests in your letter of October last. We were taking a trip on the Gulf between Tampa and Mobile when Mr. Bender, apparently in good health, was stricken with cerebral hemorrhage. We had no medical assistance on board (Mallory steamship, *Comal*) and he died in Mobile, November 20, 1911. Mr. Bender had just finished a period of hard study at the University of Chicago, working for his master's degree. Dr. Bondurant, brain specialist of Mobile, diagnosed the case as an overtaxed brain, the direct cause being sea-sickness. Maybe I have gone more into detail than is necessary but I did not know just what "circumstances attending the decease" you required. Mr. Bender was buried from his old home in Pittsburgh. He has a dear little son, Dean W. Bender, three years old, living.

Address Changes

E. G. Allen, 147 Milk Street, Boston, Mass.—Stephen Badlam, Pittsburgh Crucible Steel Company, Midland, Pa.—M. E. Brooks, Naramata, B. C.—F. D. Buffum, 6004 Jenkins Arcade, Pittsburgh, Pa.—L. L. Cayvan, 319 Hampton Avenue, Grand Rapids, Mich.—Charles S. Crane, Riverside Portland Cement Company, Los Angeles, Cal.—D. C. Dennett, 7 Washington Street, Winchester, Mass.—Cyrus H. Hapgood, The Charter Oak Shoe Company, Wethersfield, Conn.—Charles C. Johnson, P. O. Box 210, Kelowna, B. C.—Henry D. Jouett, Rm 5630, 70 East 45th Street, New York, N. Y.—George H. Leach, 50 South Street, Campello, Mass.—Charles A. Leary, 43 Central Street, Peabody, Mass.—Dr. Margaret Long, 1434 Glenaren Street, Denver, Col.—Daniel E. Maxfield, Florence Iron Works, Florence, N. J.—Herbert M. McMaster, General Electric Company, Schenectady, N. Y.—

M. P. Potter, 1954 East 73d Street, Cleveland, Ohio.—W. E. Rabbeth, 8 West Citrus Avenue, Redlands, Cal.—R. C. Simpson, 69 Montank Avenue, New London, Conn.—W. Leonard Stevens, Braden Copper Company, Rancagua, Chile.—Charles H. Stratton, U. S. P. O. Bldg., Mattoon, Ill.—Capt. G. S. Tiffany, Vancouver Barracks, Wash.—Percival E. True, 392 Raymond Street, Elgin, Ill.—George A. Tweedy, 1025 West Lake Avenue, Los Angeles, Cal.—N. D. Whitman, Ref. Concrete Pipe Company, Central Bldg., Los Angeles, Cal.

1901.

ROBERT L. WILLIAMS, *Sec.*, 12 Lake Street Brighton, Mass.

The following interesting letter has been received by the secretary from F. A. Colby concerning the part of '01 in the Technology reunion in New York:

About a dozen of us attended the lunch of '01 at the New York Tech Club and in spite of the exclusive few present we enjoyed it immensely. It was impressed upon me that a great change has come over us since we left Boston, and that is the fact that eleven years of knocking about has made us more interested in the human side of affairs than in the details of our sciences. Scarcely a word of "shop talk" was heard at either the luncheon or the dinner in the evening, but there were all sorts of jokes, stories, "scandal" and old pranks recited which made everyone feel glad he was there.

I think MacDonald, Maxson, and Derby led the crowd by mulling over old feats in connection with the team, the mystery of the "Tufts" College sign, and the like. Scully opened up some class politics—scandal which was just musty enough to be enjoyed.

A senior portfolio was lugged to light and thumbed over and then a few characters were razed and some men who had made good were praised. The following who were present want to thank the Tech steward for the punch and also some unknown friend whose locker furnished some good Scotch; Colby, MacDonald, Weil, Wildes, Maxson, R. M. Derby, Wight, Scully, Dulude, C. Brown, and Estabrook. The New York men present wish to put over a "call" on those New York men who could have come but would not take the time. Those present voted that the class of 1901 arrange to put the "old chapel" on the new Tech site as our share of the program. Corporal Bailey was sighted at the course luncheon, Friday, and Stearns; also the corporal was detained from attending the class lunch by some calculations for the Navy which required his whole time Saturday. Just think of it! At the alumni banquet at the Plaza Saturday evening, Thurlow, Lange, Casani, Spear, and those of the class lunch party were present.

—Professor Edward F. Miller writes the secretary as follows:

I want to thank you for the "Decennial Record of the Class of 1901." This surely is a good way of keeping up the interest in the fellows, and judging from the occupations it seems that the class has had its just share of success in the engineering world.

—H. W. Maxson has been located at the Tech club in New York City since last October and expects to remain until July 1. He is with the U. S. Steel Products Company (exporting branch of the steel corporation) handling Carnegie products.—Regarding the record book, E. F. Lawrence says:

It was most interesting to receive such a complete record of the members of the class and it makes me want to get into the harness once more and do something for the crowd.

—If others will only feel the same, class affairs will have quite a boom! In a letter recently received from F. S. Clapp he writes:

As chief geologist and petroleum engineer for the Bureau of Associated Geological Engineers, I have had occasion during the past year to visit all parts of this country and every province of Canada, and occasionally I meet some member of the class in a distant locality. While traveling in Oklahoma in December, I ran across D. F. Haley and find he has been so successful that he has been made president of the Haley Gas Company, with headquarters in Tulsa. This company will take up active development in the natural gas fields of northwestern Oklahoma, its business being to supply some of the largest industrial establishments in that part of the state.

—An announcement card just received from Clapp states that he has added in addition to the geological and engineering branches of his firm a new department devoted to examination and reports connected with the mining and treatment of ores. This department is in charge of Mr. C. T. Griswold, professor of mining at Carnegie Institute of Technology. His headquarters will be at Clapp's Pittsburgh office.—W. W. deBerard of the *Engineering Record* writes:

In looking over the '01 record book I found a number of names attached to companies I have much to do with and hope to look up some of these men occasionally. Recently I wrote a story about Bacus's Lake Chelan Land Company project. L. E. Williams and I got together on two or three things at Cleveland which his company did. I did not know he was '01 till afterwards. I spent an hour at Detroit with the Trussed Concrete Steel Company not knowing W. C. Taylor and F. C. Ayers were probably in the room. With Wonson, Bass, and Pearse I am in fairly close touch.

—The following is an extract from the *Montreal Gazette* of December 28, 1912:

Mr. Joseph D. Evans, who has been chief engineer of the Montreal Tramways Company since June, 1911, will sever his connection with that company on the 1st of January, and become construction manager of the Electric Bond & Share Co. of New York, one of the largest builders and operators of public utilities on the continent. It is generally conceded that the retiring chief engineer of the Montreal Tramways Company is a distinct loss to the company, as it is owing to Mr. Evans' engineering skill that the roadbed of the system has been brought to so near perfection, his methods adopted last spring being most successful in meeting the climatic conditions.

Mr. Evans was educated at the schools of Lowell, Mass., where he was born, graduating as civil engineer from the Massachusetts Institute of Technology; going south to do work in the engineering department of the then proposed Nicaraguan canal, subsequently being associated with the United States Government engineers in the preparation of the original estimates for the Panama canal, now nearing completion. He then went to South America, where he was engaged in steam railway construction in the Republic of Ecuador, building switch-backs, loops, tunnels and bridges as thick, as he puts it, as the fingers on a man's hand. After this Mr. Evans came back north and was engaged in electrical railway work in Pennsylvania, Massachusetts and Connecticut, and a little later he was doing hydraulic work as general superintendent of construction of the Great Northern

Power Company at Duluth, Minn. Subsequently he was connected with the construction of an electrical line between Buffalo and Rochester, eighty-three miles in length, and said to be the fastest system in the world, as Mr. Evans said he went over the line as a guest of the company at the rate of seventy-two miles an hour. He was then appointed engineer in charge of construction of the Canada Light & Power Co., and at the completion of the plant at St. Timothy, Mr. E. A. Robert personally offered him the position of chief engineer of the Montreal Tramways Company, which he accepted in the spring of 1911. Mr. Evans will have charge in the first place of plants under construction in the states of Utah and Idaho, as the Electric Bond & Share Co., of New York has contracts now under way in almost every state in the American Union, and valued at about ten million dollars.

—The following recent address changes have been received: E. T. Robbins, 66 Lexington Avenue, Columbus, Ohio.—Miss M. A. Holt, Bell School, Somerville, Mass.—F. F. Dorsey, Wilder Bldg., Rochester, N. Y.—W. H. Dooley, Lowell Industrial School, Lowell, Mass.—J. R. Anderson, Jr. care of T. A. Edison, West Orange, N. J.—H. W. Chambers, 1009 Grand Central Terminal, New York.—Prof. E. F. Church, West Virginia University, Morgantown, W. Va.—W. F. Davidson, 624 Farmers Bank Bldg., Pittsburgh, Pa.—L. E. Dodge, Box 1052, Rochester, N. Y.—Dr. A. DuBois, Needham, Mass.—J. D. Evans, 71 Broadway, New York F. W. Freeman, West Newton, Mass.—Rev. G. A. Hall, Lyndon, Vt.—W. J. Heinritz, 58 Pearl St., Clinton, Mass.—A. A. McInnes, 1129 Lexington Ave., New York, N. Y.—A. P. Merrill, 819 No. J. St., Tacoma, Wash.—S. B. Miller, Emporium, Pa.—L. Pearse, 5435 E. End Blvd., Chicago, Ill.—W. S. Pepperell, 21 Fair St., Edgewood Station, Providence, R. I.—O. H. Perry, P. O. Box 86, Lowell, Mass.—A. W. Peters, care of Consolidated Water Co., Utica, N. Y.—S. C. Sears, Utah Apex Co., Bingham Canyon, Utah.—J. A. Trott, 5 Locke St., Andover, Mass.—R. W. Wright, P. O. Box 301, Albany, N. Y.—W. G. Wilder, Triangle Bldg., Rochester, N. Y.

1903.

MYRON H. CLARK, *Sec.*, 43 Glen Rock Circle, Malden, Mass.
R. H. NUTTER, *Asst. Sec.*, Lynn, Mass.

The class had a dinner at the Tech Union, Saturday evening, January 18, 1913. The following men were present: Thwing, Bob Richardson, George Swett, Haddock, Cobb, Nyhen, Gould, Stiles, Calnan, Clark, Sears, Fales, Mason, Aldrich, Jackson, Nutter, Foster, Atwood, Capelle; and many of them brought friends. After the dinner the fellows listened to an intensely interesting talk on aviation by Earle L. Ovington, '04. The talk was well-illustrated with slides, showing both the mechanical principles of aviation as well as some of the spectacular features. Ovington certainly deserves the thanks of the class for entertaining them so well and especially for the hearty way in which he entered into the discussion which lasted nearly two hours

after the main talk.—A preliminary committee was appointed to look into the matter of a decennial celebration the coming summer.—The whereabouts of Edward C. Thompson and William Henry Donovan are unknown, mail having been returned from the last known addresses. If any of the class know where either Thompson or Donovan are located, the secretary would be glad to receive such information.—O. P. Scudder has given up his job with the telephone company and is going to Panama, then up the Pacific Coast and into business for himself.—Herbert C. Merrill and Mrs. Margaret Wheelock were married on December 4, 1912.—John Howard has just returned from a trip to Costa Rica.—Charles H. Avery died January 3, 1913.

Address Changes

The following address changes will be of interest:—R. D. Babson, Babson Dow Company, Boston, Mass.—A. F. Bennett, consulting engineer, New York.—J. S. Bridges, Hixon Electric Company, Boston, Mass.—G. C. Capelle, directors of the Port of Boston, Boston, Mass.—H. Crosby, Bordertown, N. J.—G. H. Gleason, Dodge Mfg. Co., Boston, Mass.—M. C. N. Hatch, Motive Power Department, D. L. & W. R. R. Co., Scranton, Pa.—A. W. Kimball, State Board of Health, State House, Boston, Mass.—G. F. Loughlin, Geodetic Coast Survey, Washington, D. C.—W. C. Lounsbury, General Superintendent, Superior Water, Light & Power Co., Superior, Wis.—R. R. Newman, 644 West 14th Street, Riverside, Cal.—C. A. Schmidt, Empire Zinc Company, Monterrey, Mexico.—C. J. Smith, Los Angeles, Cal.

1904.

EVERETT O. HILLER, *Sec.*, 12 Dane St., Jamaica Plain, Mass.
ADDISON F. HOLMES, *Asst. Sec.*, 7 Holburn St., Roxbury, Mass

There were twelve men present at the '04 dinner in New York at the time of the general reunion in January. B. A. Richardson was local '04 representative. Those who attended report a very pleasant time in spite of the small number present. Haar was one of those who so reported. He makes the suggestion that a class representative might well be selected in each of the large cities. The representative to get out the fellows of the class in his city and vicinity once or twice during the year for a social evening together. There are certainly many things to be said in favor of such a move. The secretary would be glad to have suggestions or expressions of opinion along this line.—Haar states that he has lately become engineering assistant to Dr. K. G. Frank who represents here the Sreivens Halske and Siemens Schuckert companies. He welcomes the opportunity to continually come into touch with the newest and most interesting applications of

electricity. His business address is 90 West Street and mail address 206 West 128th Street, New York, N. Y.—From Gerry at Lynnfield, Center, Mass., we have word that cider making and selling is his principal business while on the side he is chief of the local fire department having two two-horse chemical engines, a two-wheel hand chemical engine and some sixty men. Incidentally he is a family man and fond father.—We have the following clipping from the *Kansas City Times* of February 11, 1913:

L. G. Wilson, for two years assistant superintendent of buildings, under civil service, resigned yesterday to accept a position as chief engineer with the Goldberg & Son Structural Steel Company. He signed a contract for a year at a larger salary than the city pays him. Mr. Wilson is a graduate of the Massachusetts Institute of Technology.

—The following appeared in a late issue of the *Engineering and Mining Journal*:

The Mines Branch of the Canadian Department of Mines has undertaken an important investigation with a view of utilizing the cobalt contained in the ores mined for silver in the Cobalt area, much of which now goes to waste on account of the limited market for this metal. Cobalt resembles nickel in many of its properties, and it is thought that it may perhaps be substituted for nickel in steel alloys.

The services of Dr. Herbert T. Kalmus, formerly of the Massachusetts Institute of Technology, have been secured to conduct an exhaustive investigation as to the availability of cobalt as a steel alloy in place of nickel, arrangements having been effected with the Kingston School of Mining.

—Don Galusha was married on January 15 to Miss Elizabeth Richards Johnstone at 302 High Street, Keokuk, Iowa. Congratulations and best wishes being in order, are most sincerely offered.—C. F. Underhill is with the "Colonial Sugars Company" and his present address in Constancia (Cienfuegos), Cuba.—Evarts W. Charles has taken up cost work with Portland Railway Light & Power Co., and his address is 450 10th Street, Portland, Oregon.—The following letter from William A. Evans was received just after the January REVIEW went to press. It is dated at 71 Broadway, New York, the Aëro Pulverizer Company:

Your letters followed very closely upon the TECHNOLOGY REVIEW with its conspicuous absence of '04 news. I can realize how hard it must be for you to extract information out of us fellows at long range. I had, therefore, made up my mind to scrape up something for you before the next REVIEW came out. Your letters give us all a definite excuse for writing.

Since graduation my work has been mostly in connection with the application of powdered fuel to various furnaces. I have recently taken up a new line, namely, the selling of steam engines, feed-water heaters, steam separators, condensers and all auxiliary equipment for the Griscom Russell Company, at the same time retaining my interest in the powdered fuel business.

My work on the powdered fuel proposition has been interesting indeed and has consisted in application to cement kilns, rotary dryers and, in a few instances, to stationary furnaces. Also a great deal of experimenting has been done on boilers. Just at present there is every indication of successful use on commercial scale of powdered fuel on a boiler designed especially for it. We are negotiating for the control of this boiler in this country and expect great things from it. It is now being exploited on a considerable scale in England.

It is indeed a most fascinating proposition. It is attractive because of its novelty and because almost every installation is somewhat of a gamble requiring definite attention and solution. This work has been done in my operation of the Aero Pulverizer business in which I have some interest. It has given me a great deal of travel. I have been in every state in the Union east of the Mississippi River and in a great many west and have seen the country in considerable detail. On my travels I have run across many Tech men and they all seem to be doing pretty well and have a "good enough" reputation. I have not seen such a large number of the '04 fellows, but occasionally run across them. A few weeks ago I saw Esterbrooks in Buffalo and Goddard in Syracuse. I saw Joe Baker and John McQuade in New York only last week. I ran across Haar in the same building in which I am located and there is a real genuine joke connected with our meeting, for I stuck out my hand to him and said with great gusto, "Hello, Kaiser." Haar appreciated the joke and I hope the rest of you do, for they will always be remembered as an inseparable combination. Perhaps the same thing might be said of Arnold and myself. I see Arnold quite frequently as he is in New York doing some engineering work for the concern with which he is connected. They are erecting sulphuric acid plants in several parts of the country and Arnold is well placed in a very responsible and quite interesting work. He and I have made some business ventures together which have tended to draw us closer together but not to increase our financial standing any.

I have been married two years and a half and have one son. Naturally there is none better and I can prove it. He is now nine months old and expects to start preparing for Tech in about six years.

I go to the Technology club quite regularly for lunch and there is certainly a lot of enthusiasm in the air.

—From the *Boston Journal* of March 5, we learn how Earle Ovington is spending some of his leisure moments: "Earle Ovington, the Newton aviator, who is a graduate of the Institute of Technology, has utilized his spare time this winter to work out a considerable list of aviation problems which had been suggested to him during his numerous flights of the past two summers. He is chiefly engaged on the problem of stability. To an aviator with a trained scientific mind such as Ovington's, hours in the closet with models and drawings are nearly as interesting as flights over cities. He is not yet ready to announce the results he believes he has obtained, but he is looking forward to the time when he can try out his experiments in actual flights."—We are pleased to note the arrival of Merton Leslie Emerson, Jr. May he measure up to the standards of his father, than this we could wish for him but little more.—We are in doubt as to the correct mail address of the following:—Stephen L. Bradley, Frederick Nickerson, Walter F. Stutz. Any information will be appreciated.—The examination of the following revised addresses may suggest the advisability of writing to an old classmate. Do so and if you learn something of interest concerning him just let the secretary know for mention in this column:

Address Changes

Arthur B. Allen, 11th Street and Avenue D, New York City.—James R. Baldwin, Essex County, Lawrence, Mass.—N. M. Baum, Claremont, N. H.—Albert W. Bee, Jr., 112 Hilliard Avenue, Louis-

ville, Ky.—Moses Brown, Jr., 9 Orange Street, Newburyport, Mass.—Sumner E. Brown, 71 Dartmouth Terrace, Springfield, Mass.—J. S. Burrows, P. O. Box 846, Norfolk, Va.—Garrit S. Cannon, Railway Improvement Company, 165 Broadway, New York, N. Y.—Mrs. D. K. Catlin, 246 Beacon Street, Boston, Mass.—Walter H. Clough, Hornblower & Weeks, 60 Congress Street, Boston, Mass.—Charles J. Conway, Dennison Mfg. Co., South Framingham, Mass.—Evarts W. Charles, 450 10th Street, Portland, Oregon.—Frederick W. Crocker, 1661 Beacon Boulevard, Brookline, Mass.—W. H. Edgecombe, P. O. Box 38, La Porte, Ind.—W. A. Evans, 90 West Street, New York, N. Y.—F. W. Farrell, 17 Woodside Terrace, Springfield, Mass.—Robert Faulkner, 847 Maple Street, Lebanon, Pa.—A. C. Foster, Lock Box 163, Beverly, Mass.—Walter J. Gill, Jr., Room 259, U. S. Patent Office, Washington, D. C.—Miss Minnie A. Graham, Bryn Mawr College, Bryn Mawr, Pa.—Selby Haar, 206 West 128th Street, New York, N. Y.—Thomas M. Hamilton, A. S. & R. Co., Charcas, S. L. P., Mexico.—T. P. Henderson, Chicago Union Lime Works Company, 1900 West 19th Street, Chicago, Ill.—Austin Y. Hoy, care of Sullivan Machinery Company, 814 Salisbury House, London, England.—Charles W. Hoy, New Jersey Gas Company, Glassboro, N. J.—Joseph A. Keenan, Manual Training High School, Brooklyn, N. Y.—Carl King, 7 St. John Street, Jamaica Plain, Mass.—William H. Koppleman, 205 Keller Bldg., Louisville, Ky.—J. Lawrence Lyon, 700 Westinghouse Bldg., Pittsburgh, Pa.—Mrs. John D. Mackay, 64 Merrymount Road, Quincy, Mass.—Roy D. Mailey, 25 Hawthorne Street, Lynn, Mass.—Birchard F. Miner, Greenfield, Mass.—Lewis Newell, 23 Congress Street, Bradford, Pa.—Rolf R. Newman, 644 West 14th Street, Riverside, Cal.—Harry F. Noyes, Dayton Coal & Iron Co., Dayton, Tenn.—Henry S. Pitts, 49 Westminster Street, Providence, R. I.—Rowland G. Rice, 632 Brown Marx Bldg., Birmingham, Ala.—H. K. Richardson, care of National Committee, Y. M. C. A. 3 Quinsan Gardens, Shanghai, China.—J. W. Roland, Nova Scotia Technical College, Halifax, N. S.—Frederick B. Saegmuller, Bausch & Lomb Optical Co., Rochester, N. Y.—Edward C. Scofield, 87 Aberdeen Place, Woodbury, N. J.—F. J. Severy, care of Assistant Chief Engineer's Office, Culebra, Canal Zone.—A. D. Smith, Paragon Refining Company, Toledo, Ohio.—L. P. Sperry, Scoville Mfg. Co., Waterbury, Conn.—Henry W. Stevens, 48 Wallingford Road, Brighton, Mass.—O. G. Thurlow, Alabama Interstate Power Company, 947 Brown-Marx Bldg., Birmingham, Ala.—Charles F. Underhill, Constancia, Cienfuegos, Cuba.—Thomas Wakefield, Glidden Varnish Company, Box 264, Denver, Colo.—Reginald A. Wentworth, 47th Street and Baltimore Avenue, Philadelphia, Pa.—Oliver M. Wiard, 21 Walnut Street, New Britain, Conn.—Ralph B. Williams, Minas Dolores Y. Anexas, Matehuala, S. L. P., Mexico.

1905

GROSVENOR D'W. MARCY, *Sec.*, 246 Summer St., Boston, Mass.

Roy Hutchins Allen and Miss Grace Martha Hoxie were married on February 5 at Cambridge, N. Y. They expect to be at home after April 1, at Villa Escobedo, Chihuahua, Mexico.—Charles Robert Adams and Miss Anna Gregory were married February 17, at Washington, D. C. They have gone out to California, where Adams' work with the Geological Survey is now located.—Henry Everett Darling and Miss Annie Ramsay Johnston were married on March 1, at Plainfield, N. J. Darling is with the American Tel. & Tel. Co., at 15 Dey Street, New York. John Ayer is now located in Boston, as engineer with the commissioners of the Port of Boston. He is living in Newton Highlands, and when the secretary met him the other afternoon out walking, and asked for news items, John said "Here is one right here," and lifted the shade of the baby carriage he was pushing, and introduced John Ayer, Jr., who was born on the 6th of last October. He also said that Harry Gabriel is doing location engineering in South America, with headquarters at Buenos Aires.—The assistant secretary, or vice-secretary, or vice-assistant or *vice-versa* (which is it, Grafton?) reports the glad tidings of the arrival of Grafton Brookhouse Perkins, Jr., on January 14. Grafton himself is digging right into the advertising work in Baltimore, and is active in the Associated Advertising Clubs, being chairman of one of the important committees for the convention in June.—The arrival of Gorham Kingman Crosby is announced, on March 20, weighing eight and one third pounds.

The '05 luncheon at the time of the New York reunion was held at the Taverne Louis, January 18, and was a very enjoyable and enthusiastic affair. The following were present: F. G. Bennett, White Plains, N. Y.; Gorham Crosby, New York City; John C. Damon, New York City; Andrew Fisher, Jr., Boston; George B. Jones, Chicago; R. F. Lovejoy, Lowell, Mass.; I. Niditch, Boston; Paul J. Ralph, New York City; George I. Rhodes, Boston; N. A. Richards, New York City; Charles Saville, New York City; Thomas Shaw, New York City; F. Charles Starr, Washington, D. C.; W. A. Taylor, New York City; G. C. Thomas, Bridgeport, Conn.; A. O. True, Albany, N. Y., and H. M. Wilcox, Madison, N. J.

The crowd around Boston got together on February 14 for a Valentine Supper at Bova's, followed by a bowling party, to get in shape for the coming meet with 1902. The following men were present: Ball, Whitney, Fisher, Buff, Tufts, Bell, Briggs, Gardner, Crowell, Niditch, Hadley, Curtis, Helpern, W. K. Lewis, Barber, Rhodes, Coffin, Cole, Butts, A. H. Abbott, Guibord, Kenway, Lindsly, Marcy, and Tarbett. No phenomenal scores were made, but everybody had a good time.

Jimmie Barnes has moved another step up the ladder as the following clipping from the *Syracuse Post-Standard* testifies:

James P. Barnes has resigned as chief engineer of the Syracuse and Central New York lines of the New York State Railways to become general manager of the Syracuse & Suburban Railroad Co.

The resignation of Mr. Barnes from the interests now represented in the New York State Railways, after an official relationship of five years, and his connection in the Syracuse & Suburban Railroad field, will be effective February 15.

No arrangements for a successor to Mr. Barnes have been made, General Manager B. E. Tilton said last evening. The duties of the office might be divided, he added, and the vacancy would not be filled until after the situation had been thoroughly canvassed and the best method of procedure determined.

In Syracuse street railway circles Mr. Barnes' appointment as general manager, rumors of which have been ripe for a week, is believed to be preliminary to a general improvement in the physical condition and service of the Syracuse & Suburban Railroad Co., which operates a line between the city and Edwards Falls through Fayetteville and Manlius, with a branch between Orville and Jamesville.

The newly appointed general manager is a Syracusan, the son of James Barnes, for many years secretary of the Trust & Deposit Co., of Onondaga. He goes to the Suburban well equipped for the duties of the position, although only 32 years old. He was graduated from the Massachusetts Institute of Technology in 1905 with the degree of electrical engineer, and after a few months in the employ of a Utica concern entered the service of Pass & Seymour of this city.

In 1906 he became connected with the Oneida Railroad, and under Mr. Allen assisted in the electrification of the West Shore Railroad between this city and Utica. With the completion of that work, Mr. Barnes joined the staff of the New York State Railway lines and served as assistant engineer on the three properties with which he is now connected.

Upon the resignation of William J. Harvie as chief engineer of the system in March last, Mr. Barnes succeeded him.

—Sixty of Barnes' associates in the company he is leaving tendered him a banquet in the nature of a surprise party. Being told that one of the shops was afire, he rushed there in a taxi, to find his friends gathered around a table where high tension insulators were used for vases, and other typical objects served as dishes, the whole affair being a demonstration of good-will and best wishes for success in his new position.—John W. Taylor writes that he is knocking around Europe for a while, to get acquainted with the engineering of the older countries. Just now he is works engineer with the Crittall Mfg. Co., of Braintree, England.—John Damon writes:

Your card of the 13th was forwarded to me at New York City, where I have been for the last six months, with the Electric Bond & Share Co. I saw more '05 men at the reunion here last month than in the five years previous, and had a great time. I don't expect to be in New York very much longer but where I shall be is not yet decided.

—Ned Broad sends in the following, from Detroit:

Since with the Packard Motor Car Company the spare moments to look up Tech fellows, or to even get a little rest are unheard-of quantities. The truck end of the business is increasing most rapidly and our hours at the works are increasing in number as fast as the business is progressing. Nothing would please me more than to meet a few Tech fellows and have a little chat,—but expect I must wait for the next reunion.

—Hallett R. Robbins has just been appointed assistant professor of metallurgy, at the State College of Washington, Address, P. O. Box 181, Pullman, Wash.—The *Daily Gazette*, of Lawrence, Kans., notes the appointment of H. L. Jackson to be state chemist of Idaho, as follows:

Professor H. Louis Jackson has tendered his resignation as assistant professor of chemistry in charge of foods at the university, and has accepted the position of state chemist of Idaho. He will be located at Boise in the new laboratory of the Idaho State Board of Health.

Professor Jackson came to the university from the Massachusetts Institute of Technology and began his present work in August, 1907. At that time no laboratory had been set aside for the state food work and the work was begun in a very modest way in a private laboratory in the chemistry department under the direction of Professor E. H. S. Bailey. After some months the work was transferred to a larger room, which it was thought would be ample for several years to come.

It has been Professor Jackson's privilege to see the laboratory grow and the work increase until instead of being the only chemist engaged in the work, he employs two full time assistants and a stenographer on half time.

The laboratory that once seemed almost empty has become so crowded that for over two years Professor Jackson has had plans drawn for a rearrangement, which would increase the working facilities, but even with this work partly finished during the past summer, the increased room has been at once utilized.

—Waldso Turner is now vice-president of the Iron City Engineering Company, with offices in Pittsburgh and Detroit. He keeps so busy going from one place to the other, that he "has no news" and glories in his shame of still being single.—Maurice B. Landers has left the Patent Office to go with Edwards, Heard & Smith, patent attorneys, 613 Old South Bldg., Boston.—R. E. Bell is with the Atlantic Terra Cotta Company, 201 Devonshire Street, Boston.—Frederick J. Fraser's address is 1308 Park Street, Alameda, Cal.—Ernest N. Briggs is at 54 Ridgewood Place, Springfield, Mass.—William Tufts should be addressed at Sudbury, Mass.—A. H. Abbott is now located in Boston, General Electric Company, 84 State Street.—That Ros Davis is still interested in naval matters is shown by an article in the *Scientific American*, over his name, on "Bow Rudders on Ferryboats."—We are glad to report a great improvement in the condition of Ilias Murr, who has been sick since last July. Murr had a number of hemorrhages from the lungs, but specialists now report that the process has become inactive, and probably healed. As soon as he is able to make the journey Ilias will return to his home in Mt. Lebanon, Syria, to stay for a year or two or until he has completely regained his health.

We are sorry to note the death of two '05 men: John F. Dickie returned from California last December, and died at his home in Cambridge on December 19.

Mail addressed to Assistant Naval Constructor Frank D. Hall, was returned from the U. S. Navy Yard at Mare Island, Cal., marked "Died January 2, 1913."

1906.

C. F. W. WETTERER, *Sec.*, 147 Milk Street, Boston, Mass.JAMES W. KIDDER, *Asst. Sec.*, 50 Oliver Street, Boston, Mass.

On Wednesday, October 9, 1912, William Couper was married to Miss Eloise Hirst of Purcellville, Va. The ceremony was performed in the St. Peter Episcopal Church at Purcellville and was largely attended. James B. L. Orme was best man. Couper is with the Pennsylvania Railroad in New York City and resides in the suburb of Richmond Hill.—Announcement was made in October, 1912, by Messrs. Rosenbaum & Stockbridge, patent attorneys of New York City, that James B. L. Orme had become associated with their firm. Orme is a Course V man but has been engaged in the practice of patent law for some years. He was with Messrs. Duell, Warfield & Duell of New York City prior to October.—Mr. and Mrs. Stephen A. Bulfinch of Los Angeles, Cal., announced in December the engagement of their daughter, Miss Constance Irene, to L. A. Parker. Since leaving the Institute, Parker and Edward L. Mayberry have conducted an architectural engineering business in Los Angeles under the firm name of Mayberry & Parker with offices in the Pacific Electric Building. Miss Bulfinch is a graduate of the University of California.—Another 1906 man has launched out for himself. E. B. Evans writes from Montreal, Canada, that he has opened an office as general contractor at 74 St. Denis Street. The following extract from his letter is of interest:

I have been here since the fall of 1907 and have been working as general superintendent for D. G. Loomis & Sons until November of this year. I have superintended the construction of some of the largest factories in Montreal during the last five years among which are the following:

Mt. Royal Spinning Mill, United Shoe Machinery (new plant), J. Eveleigh (trunk factory), Berliner Gramophone Company (new plant), Imperial Pin Company, Dominion Linseed Oil Company, New Car Shops (C. P. R. Angers), J. W. Peck & Co., Montreal Light, Heat & Power Co. (new concrete coal handling plant), M. L. H. & P. Co. (ammonia plant) (coke storage plant), and other smaller structures).

The first of last month I severed my connection with Loomis and have branched out for myself as explained in my letter head. I have on hand at present one contract for R. C. Jamieson & Co., paint manufacturers.

Montreal is at present doing more building than at any time in her history and the outlook here is very bright.

—We all extend our best wishes to Evans in his new field.—T. L. Hinckley, who was graduated in sanitary engineering, writes as follows:—

In 1906-07, I worked with the Ohio State Board of Health, on water and sewage investigation work all over the state.

I taught at the University of Minnesota during the first half of 1908; the latter half I spent at Altoona, Pa., in the office of the city engineer as a special investigator of sanitary matters.

For three months in 1909 I had a temporary berth with the Columbus (Ohio) Filtration Works. During three more months I was a contractor's assistant in St

Paul, Minn. The balance of the year I spent in Altoona, being recalled to the same work as before.

In May, 1910, I went to Montreal to make water analyses for Messrs. Herring & Fuller, New York. Later on I came here, staying until July, 1911.

In August, 1911, I left the engineering field to enter the Bureau of Municipal Research, New York, and have been in this sort of work ever since. Last October I received a position in connection with research work in Westchester County, N. Y. where I am still engaged.

—A daughter, Jane, was born to Mr. and Mrs. W. N. Monroe on January 28. Monroe since shortly after graduation has been in Texas with Stone & Webster Companies. Up to the spring of 1912, he was in Dallas as electrical engineer of the Dallas Electric Light & Power Co. He is now general superintendent of the Port Arthur Light & Power Co., Port Arthur, Texas.—The assistant secretary was married October 22 to Miss Alma D. Stone of Medford, Mass. Kidder is with the commercial engineering department of the New England Tel. & Tel. Co., 50 Oliver Street, Boston.—On September 11, H. K. Monroe was married to Miss May Long of Tacoma, Wash. Monroe is with the Tacoma Railway & Power Co., Tacoma, Wash.—The announcement of the marriage of Miss Annie Ramsay Johnston to Henry E. Darling on March 1, at Plainfield, N. J., has just been received. According to last advices, Darling is with American Telephone & Telegraph Co. at 15 Dey Street, New York.—Messrs. Lockwood, Greene & Co. announced on January 30 that Harold V. Coes, manager of their Chicago office for some time past, had been transferred to their Boston office to assume charge of special work. Coes states that his new position is that of special assistant to the various members of the firm and the work will be practically all engineering, principally on the executive side.—Ray J. Barber was recently in Boston on a short business trip. He is located in Los Angeles, Cal., as mining engineer with offices in the Laughlin Building.—We hear from the *Educational Journal* of a recent appointment of C. F. Willis:

Following the appointment of Professor Holman of the University of Arizona to the faculty of Leland Stanford, Charles F. Willis of Boston has been appointed to the place left vacant. Mr. Willis is one of the strong mining alumni of the Massachusetts Institute of Technology and with practical experience in the West.

—H. W. Beers, recently chief engineer of the Southern Ferro-Concrete Construction Company, Atlanta, Ga., has been elected vice-president of the company.

—Those members of the class who have not subscribed to the Alumni Fund should "buck up." We need a subscription of some amount from every one of the 480 members. If you are one of the delinquents, follow the good example of those who have signed up.

1907.

BRYANT NICHOLS, *Sec.*, 10 Grand View Road, Chelsea, Mass.
 HAROLD S. WONSON, *Asst. Sec.*, 149 East Main Street, Gloucester,
 Mass.

I. *A Word from the Secretaries*

The process of preparing a class book does not always move as rapidly as one thinks it will when he begins. We expected that our five-year book would be in the hands of the class by February 1, but it proved impossible to follow out that plan. By this time, however, you should have your copy, and we hope that you have thoroughly enjoyed it. Please be sure to write the secretaries if there are errors of any sort in it that you notice. We regret to say that our class had a very small showing at the big January reunion in New York. L. A. Freedman was the representative of '07 in that city who personally worked to get out the members of our class to the luncheon and the banquet, and he made strenuous efforts, but was rather poorly supported. Only six of our class appeared at the luncheon: L. A. Dickinson, L. A. Freedman, W. H. Martin, H. W. Mahr, Everett Rich and J. J. Thomas. Other members of the class who took in other events of the reunion were: Macomber, Bob Keyes, C. A. Eaton, A. B. Arnold, E. J. Tully, George Griffin, Bob Angus, Bill Otis and A. H. Jansson.

II. *Miscellaneous Notes*

There are four members of the class whose engagements have been announced within the last few months. Clif Draper expects to be married to a Walla Walla (Wash.) girl in June.—Harold Wonson, in June, will marry Miss Ruth Miller of Gloucester.—J. C. Bradley is engaged to Miss Helen C. Humphrey of White-water, Wis.—J. S. Nicholl is engaged to Miss Muriel N. Willard of Sharon, Mass. Our hearty congratulations to all these fellows.—The second child, a girl, Dorothy, arrived in the home of the secretary on March 14.—Sam Coupal writes under date of February 9 as follows:

Have recently returned from a four months' trip in England and France, on a shoe machine deal. The deal was the sale of our foreign patents on a staple-welding machine, and is practically closed, pending certain improvements which I expect to complete in about three weeks. I have decided to stick around Boston for a few years and will enter business with my father, devoting my time to the managing end of exploiting his genius.

Sam's address is 821 East 4th St., South Boston, Mass.—The following clipping from the *New York Times* of February 9 is of interest: Details of another move in the American invasion of Europe were learned of by a young constructing engineer, Willis Ranney, a graduate of the Massachusetts Institute of Technology

in the class of 1907, who has been stopping at the Hotel Astor for several days and who sailed yesterday on the *Oceanic* for Barcelona, Spain.

"American engineers are going to tame the swift Ebro River, and Mr. Ranney is sailing to superintend the construction of one of several dams to be thrown across the historic stream and which will form a part of the immense hydro-electric development projected for the purpose of furnishing light and power to Barcelona.

"The advance guard of American engineers is already on the ground, completing the necessary preliminary work. Dams and power houses are to be built, and an irrigation system on a large scale is also part of the project. The Pearson Engineering Company, Limited, is doing the construction and development work, the operating company being the Ebro Irrigation and Power Company, Limited.

"Mr. Ranney was unable to say exactly how many million dollars were involved in engineering invasion of Spain, but said that he had just returned from San Antonio, Texas, where the Pearson Company had completed a \$7,000,000 job, and that the harnessing of the Ebro was a much larger work. Most of the company's Texas organization, he said, had been transplanted bodily to Barcelona."

III. Address Changes

These addresses will correct some of those given in the November REVIEW: C. F. Baker, 300 South Ashland Avenue, La Grange, Ill.—J. M. Baker, 683 Atlantic Avenue, Boston.—A. L. Burwell, Box 208, Winsted, Conn.—A. H. Cenedella, Hollywood Avenue, Crestwood, Yonkers, N. Y.—A. O. Christensen, Trojan, S. D.—E. R. Cowan, care of D. X. Murphy & Bro., Louisville, Ky.—G. A. Crane, 1636 McCormick Bldg., Chicago.—P. L. Cumings, 3 Spruce Street., Boston.—A. H. Donnewald, 3709 Finney Avenue, St. Louis, Mo.—C. N. Draper, Patent Attorney, General Electric Company, Schenectady, N. Y.—John Evans, Alameda and South Race Streets, Denver, Colo.—L. F. Hallett, Charles H. Tenney & Co., 201 Devonshire Street, Boston.—E. W. James, 7205 Blair Road, Washington, D. C.—A. R. Jealous, 85 Newbury Street, Boston.—R. G. Kann, 158 Dethridge Street, Pittsburgh, Pa.—W. I. Keeler, 473 Madison Street, Brooklyn, N. Y.—H. M. Lewis, Jr., Standard Portland Cement Corporation, Napa Junction, Cal.—W. S. Lucey, Eastman Kodak Company, Rochester, N. Y.—F. S. MacGregor, 78 West Street, Hyde Park, Mass.—H. W. Mahr, 33 Woodruff Street, Brooklyn, N. Y.—W. D. Milne, 25 Meriam Street, Lexington, Mass.—J. E. Moore, care of Electric Bond & Share Co., 71 Broadway, New York City.—Allen Pope, 13 Marathon St., Arlington, Mass.—J. F. Rehn, 25 Lee Avenue, New London, Conn.—S. E. Rockwell, Puget Sound Bridge & Dredging

Co., Central Bldg., Seattle, Wash.—E. H. Squire, 711 Chestnut Street, Waban, Mass.—A. F. Stevenson, Queen City Dairy Company, Buffalo, N. Y.—John Tetlow, 167 Massachusetts Avenue, Boston.—J. D. Whittemore, Superintendent, Gardner Electric Company, Gardner, Mass.—L. C. Whittemore, 5642 Washington Avenue, Chicago.

1908.

RUDOLPH B. WEILER, *Sec.*, care The Sharples Separator Company, West Chester, Pa.

CHARLES W. WHITMORE, *Asst., Sec.*, 1553 Beacon St., Brookline, Mass.

I. *On the Part of the Secretaries*

The eighteenth bi-monthly dinner was held at the Boston City Club on January 14. The matters of a five-year book and the five-year reunion were discussed. The book will be acted upon at the annual dinner. The following were appointed as the five-year reunion committee: E. I. Williams, E. J. Beede, O. S. Lyon, R. J. Batchelder and A. W. Heath. Those present at the meeting were, A. W. Heath, C. W. Morrison, C. F. Joy, Jr., R. J. Batchelder, M. Ames, G. E. Freethy, B. W. Cary, B. S. Leslie, W. D. Ford, H. T. Gerrish, O. S. Lyon, C. W. Whitmore. The evening wound up with the usual bowling match.

The secretary wishes to apologize for an exceedingly careless mistake just called to his attention in the January REVIEW. Alfred Bennett Babcock was married to Miss Hazel Chase Brant on October 29, and not to Miss Helen Beasley, as stated. The error was due to a careless transcription made from a newspaper report.

HENRY W. HOOLE

The *Saginaw Daily News* publishes the death of Henry Hoole:

A really remarkable and valuable character was lost in the death, of H. W. Hoole of septic poisoning, following an attack of erysipelas. He had by his own efforts, his untiring energy and pluck created a place for himself in the world, with a fine career ahead of him, as pointed out by Charles R. Stevenson, of the Dodge Mfg. Co. of Mishawaka, Ind., with whom the late Mr. Hoole was for some time closely associated in the Miller, Franklin & Stevenson Co., of New York, in efficiency engineering. From Mr. Stevenson, and from Fred Buck, general manager of the Lufkin Rule Company, of this city, the *News* learns something of the life history of the deceased, who in the twenty-nine years of his existence had accomplished so much. Both are great admirers of the young man and unite in considering his brief history an inspiration for young men generally.

Hoole was born at Lowell, Mass., in very humble circumstances, though of excellent parentage, in 1884, and early in life showed the determination and conscientious effort, which with marked intelligence and ability characterized him throughout. Through his own unaided efforts he supplemented the ordinary common school teaching he received with a thorough training in the Massachusetts Institute of Technology, at Boston. While pursuing his studies in the Institute, he

maintained himself by working at different employments, a great portion of his time being spent with Boston newspapers, where he made his mark.

He was graduated in 1908, and became associated with the Miller, Franklin Stevenson people in efficiency engineering, in which he had specialized. He continued with this firm for about three and a half years, meeting with great success, and during which period he came in contact with the Lufkin Rule Company. Then he became the successful general manager for the Hardwood Products Association with headquarters at Indianapolis, and crowded a vast amount of experience into his continuance in that position. He succeeded in largely increasing the factory efficiency of the association, which has plants in various centers and wrought successfully along the line of standardizing products. He made a mark, also, by his great success in methods devised and carried out for saving waste in hickory, a wood very extensively used in the products of the association.

His work attracted attention from big institutions all over the country and the competition for his services was keen; all this being accomplished while he was yet under thirty years of age. The Lufkin Rule Company of Saginaw, succeeded in securing his services, and he entered the employ of that firm as factory manager on November 1 last, his work since that time giving the highest degree of satisfaction, and indicating that even bigger things were ahead of him.

Mr. Stevenson, who came here especially to attend the funeral, speaks of the deceased most feelingly, and considers his career one deserving of being brought to attention, not only on account of what Hoole accomplished for himself, but by reason of the magnificent example it affords to boys and young men generally, showing them that American life is still full of splendid opportunities to those who strive worthily and well. Mr. Buck also expresses the highest admiration for the character and life of Mr. Hoole, and it will interest many to know that this young man was the character so forcibly and ably described by Forrest Crissey in the *Saturday Evening Post* in his recently published stories of an efficiency engineer and his experiences; these experiences incorporating some of the methods pursued by the Lufkin Rule Company in its factories.

ANNUAL DINNER

The fifth annual dinner was held at the Boston City Club and many new faces were observed around.

The first business taken up was that of the five-year book and it was unanimously voted that the first class book to be published should be a ten-year book.

Next "Pop" Gerrish spoke on the Technology Fund. Our class now stands fourteenth in the list of forty-four classes. Forty per cent. of our estimated amount has been subscribed, but only a little over 26 per cent. of the class members have done this. "Pop" quoted Dr. Maclaurin and brought the question before the fellows in a very forcible manner. He said it would be much more valuable to the M. I. T. if 75 or 80 per cent. of the class subscribed, even if the total amount subscribed was only 20 or 30 per cent. for this reason, in order to build the new Tech right a great deal more money must be obtained than that which the alumni will subscribe and the excess has got to come from rich men. Now if they can be shown that the alumni are interested in the new development and that 80 per cent. have subscribed, outside subscriptions are much more likely to be obtained.

Whitmore then described the coming 1908 class reunion with the aid of maps and photos. The committee as appointed by the

resident secretary was approved. Each man on the committee will have special duties but will work only with the approval of the committee as a whole. The committee is as follows,—A. W. Heath, chairman and advertising; R. J. Batchelder, treasurer; O. S. Lyon, program of entertainment; E. J. Beede, master of ceremonies; C. W. Whitmore, housing.

The resident secretary told of the difficulties encountered and the places other classes have been and of the selection of what seems to be an ideal location. The headquarters will be Aberdeen Hall, located near Hyannis on the south side of Cape Cod on a point of land containing a private estate of one thousand acres. Aberdeen Hall will not be open to the public until after our reunion. There will be tennis, boating, sharp fishing, etc. There will be something doing all the time. The fellows will leave Boston, June 11, the day after "Pop's" and stay until Sunday night, June 15. The total expense, exclusive of transportation will probably not be over \$20 per man, for the four days. This includes hotel, boating, fishing, beer, tobacco, prizes, etc.—everything. The expense for those who stay less than four days will be proportionately reduced.

We hope every man will make arrangements to be there as there certainly will be a good time at a very reasonable expense. Full information will be sent to the class members later.

In order to cover the preliminary expenses of the committee it was voted that the class secretary forward \$25 to R. J. Batchelder as soon as possible. This money to be accounted for later by the committee.

An experience meeting was held after the dinner and some of the fellows' past history was very interesting. Those present were Fred L. Franks, H. T. Gerrish, Carl W. Kenniston, H. T. Chandler, W. H. Toppan, Wilfred E. Booth, Matthew Porosky, H. W. Calder, A. B. Appleton, Joseph B. Sando, Burton W. Cary, Edward J. Scott, Frederick A. Cole, Monroe Ames, Ralph J. Batchelder, E. R. Smith, J. McGowan, Jr., P. A. Esten, W. D. Ford, J. W. Wattles, A. W. Heath, C. W. Whitmore, L. H. Allen.

NEW YORK REUNION

The class luncheon was held at the Machinery Club and the following were present: S. H. Daddow, A. L. Gardner, C. H. Shapleigh, Charles M. Steese, H. C. Schriefer, J. C. Brooks, H. E. Batsford, I. M. Guilford, William B. Given, Jr.

One of the female members of our noble aggregation sent word that she would attend and as we were to lunch in a private dining room all were a little nervous up to the last moment lest she would find the place. Schriefer did most of the talking and it was mighty interesting to hear of his life in Siberia. There were

nine of us at the luncheon and eight of us were in different kinds of business which is certainly the best possible demonstration as to the breadth of knowledge and ability the class of 1908 stands for.

It was impossible to get a list of all those who attended the banquet, though many were present.

II. *Matrimonial*

The engagement is announced of Miss Frances Marie Rider to J. M. Burch, Jr.

III. *New Addresses*

R. C. Albro, 23 Hall Avenue, Nashua, N. Y.—Arthur P. Appleton, Lock Box 144, Beverly, Mass.—R. E. Beck, 127 Cornell Street, Newton Lower Falls, Mass.—George M. Belcher, 171 Russell Street, Manchester, N. H.—H. H. Bentley, 1237 Morse Avenue, Chicago, Ill.—W. E. Booth, Box 78, Waterville, Conn.—Alex. H. Bradford, 115 Bellevue Avenue, North Seattle, Wash.—H. W. Calder, 47 Clifford Street, Readville, Mass.—A. O. Christensen, care New Reliance Gold Mining Company, Stewart, via Trojan P. O., S. D.—C. S. Clapp, 21 Smith Block, South Framingham, Mass.—A. S. Cohen, 24 Canterbury Street, Dorchester, Mass.—LeSeue T. Collins, 7 Highland Street, Hyde Park, Mass.—R. C. Collins, W. H. McElwain Company, Manchester, N. H.—John S. Coye, Marysville, Cal.—W. F. Davis, 50 Oliver Street, Boston, Mass.—Gregory M. Dexter, Box 195, Salt Lake City, Utah.—W. F. Dolke, 47 Cleveland Street, Arlington, Mass.—Clifton N. Draper, General Electric Company, Patent Department, Schenectady, N. Y.—Paul A. Esten, Stoughton, Mass.—H. L. Fletcher, 57 Abbott Street, Lawrence, Mass.—Ernest G. Genoud, 27 Hayward Place, Boston, Mass.—Harold P. Gurney, 196 Trenton Street, East Boston, Mass.—Philip J. Hale, 1515 Monroe Bldg., Chicago, Ill.—Sherwood Hall, Jr., 893 Boylston Street, Boston, Mass.—N. S. Hammond, Washoe Sampler Department, Butte, Mont.—Julian H. H. Harwood, Floriston, Cal.—Paul H. Heimer, 498 Norfolk Street, Mattapan, Mass.—Alfred R. Hunter, 14 Barnard Street, Hartford, Conn.—Clarence L. Hussey, Fruit Hill, Providence, R. I.—W. W. Karnan, U. S. Food and Drug Inspecting Bureau, Appraisers Stores, New York, N. Y.—John A. Kydd, 5 Harrison Street, Olneyville Station, Providence, R. I.—Orrin S. Lyon, 45 Autumn Street, Everett, Mass.—F. H. McGuigan, Jr., Grand Trunk Railway, McGill Street, Montreal, Can.—Thomas W. Orr, 603 East 47th Street, Kansas City, Mo.—H. S. Osborne, Apartment 21, 430 West 119th Street, New York City.—Alfred G.

Place, 710 Terry Avenue, Seattle, Wash.—Edward A. Plumer, 15 Dey Street, New York, N. Y.—Joseph Pope, 163 Newbury Street, Boston, Mass.—Miles Sampson, 430 Manchester Street, Manchester, N. H.—Frederick B. Schmidt, 5427 Jefferson Avenue, Chicago, Ill.—R. A. Schmucker, 15 Greenwich Park, Boston, Mass.—C. H. Shapleigh, G. B. Merrill & Bros., Jackson, Miss.—Joseph H. Sinclair, 406 Lougheed Bldg., Calgary, Alberta, Can.—H. P. Sweeney, Stroudsburch, Pa.—A. H. Tashjian, 1900 Euclid Avenue, Cleveland, Ohio.—J. R. Thorndike, 15 Beacon Street, Boston, Mass.—John T. Tobin, Box 745, Princeton, W. Va.—R. B. Todd, 48 Thorndyke Street, Lawrence, Mass.—W. H. Toppan, Technology Chambers, Boston, Mass.—Harold E. Weeks, 212 Bellevue Avenue, Upper Montclair, N. J.—E. I. Wells, High School, Winthrop, Mass.—C. W. Whitmore, 1553 Beacon Street, Boston, Mass.—George D. Whittle, Room 1011, Kerckhoff Bldg., Los Angeles, Cal.—C. W. Bailey, Gorham Mfg. Co., Providence, R. I.—Prince C. Hopkins, 30 West 44th Street, New York, N. Y.—Yuen Leong, F. Tongshan, North China.—Martin P. Le Veyra, Jr., Philippine Assembly, Library, Manila, P. I.

1909.

CARL W. GRAM, *Sec.*, care Walter Baker & Co., Ltd., Milton, Mass.

The letters received during the last two or three months have been shy of news but boosted the funds in the treasury considerably. Many of the fellows made use of the suggestion to pay their dues in lumps—five years in advance, our high-mark man being Harry Whitaker who is good until January 1, 1920. Of course we don't wish to deprive Harry of the leading position, but—some of "youse guys" get busy.—Announcements have been received of the following marriages:—Charles J. Belden was married on February 1, to Miss Frances Broadwater Phelps at Garvanza, Cal. Mr and Mrs. Belden will be at home after the fifteenth of March at Ross, Cal.—Allen Jones, Jr., was married to Miss Helen Iredell Williams of Wilmington, N. C. on January 14.

Letters

Elmo Robinson writes from Henderson N. Y.:

I continue to preach two sermons a week, when I can get anybody to listen. Between times I am making a social survey of one of my towns, arranging entertainments, lectures, etc., and also doing some studying and thinking. The new church which we built to replace the one destroyed by fire is almost completed, but I have found as many difficulties in raising \$5,000 as Tech seems to have in reaching a much larger sum. For Henderson I have now the idea of building a Rural Social Center if I can only get the people interested. I should be glad to hear from any architect who would like to draw me some plans. Several of my friends have thought my Tech education wasted, but I find people the most interesting of biological specimens.

—Carleton Hubbard has just come to life down in Rhode Island. He writes:

My conscience is a bit uneasy because it is so long since I wrote to the class secretary—I believe this is my first offence—(check) and all the more so when I note the eagerness with which Nickerson and MacKenzie, '11, who are living in the same house, dig into the class notes when the REVIEW comes around. I might add that I also turn first to the class news. It must be slick to go to South America and write back a long chatty letter that will be of general interest. Building mills in Saylesville, R. I., is a bit prosaic. This is to explain my long silence. However, as you want news, here goes. Sometime last May Mr. and Mrs. Charles T. Chase of Saylesville announced the engagement of their daughter Katherine Florence to me, so you see I am getting near to that "matrimonial" paragraph. Please note the following: Beginning March 8 my permanent address will be Greenwich, Conn., and my business address With Cross & Brown, 22-24 West 38th St., New York City.

—The following entertaining letter was received from Arthur Morrill who is at the Pei-Yang University, Tientsin, China:

Your touching letter received this morning. A class luncheon in New York sounds good to me, but as it was all over and gone nearly a week before I received the notis, I fear I will have to pass it up this time.

Can you imagin anything any worse than painfully grinding out a letter and then having it lost? March 25, 1912, according to my little book, I sent letters to you and to Shaw, but as far as results are concernd they might just as well have gone down with the *Titanic*. Even the humble three-bone check which I sent to the treasurer never came back.

So I heed your veild suggestion and enclose another check, this time for five dollars, which I believe pays my class dues thru the year 1916.

In the letter which sank I had a few things to say about the unsettled conditions during the revolution. Now, however, it is "Chinese Republic, 2d Year," and the new state of things seems quite a matter of course. There certainly has been a great change at the hart of things, and more change will come out of it, but the change from the point of view of the average Chinese has been very small. Of course, it could not be expected to transform four hundred million people over night. But I should say that the great majority of the people have had so far little occasion to know, and less occasion to care, that the Manchus have gone and the Republic has come.

A few days ago I red in some American magazine of the wonderful change, how the tyranny of the Manchus had been swept away and a "government of the people, for the people, and by the people" had been set up in one short year. There has been a change, but it is not as spectacular as that. The Chinese of the North, at least, have suffered little tyranny from the Manchus during recent years and were more or less indifferent to the abdication. They have suffered from the lack of a firm, efficient central government, but they have not yet obtaind that under the republic. Under the empire the people had a very large share in the management of their local affairs, probably as large a share as they will get for some time under the new government.

In the people of the large cities, and especially among the educated classes, there is evidence of a new spirit and a new order of things. Queues are becoming scarce among young and middle-aged men above the station of coolies. But I herd the other day how a Tientsin house "boy" went back to his home in Shantung for a vacation and told the people about it, and they wouldn't believe him.

In spite of the somewhat muddled condition of the country, our university work is going on fairly well. We have just graduated a class of thirty-eight, nineteen miners and nineteen civil engineers, and have taken in fifty-three new men to form the new classes. I had an interesting time assisting at their oral examination in English.

As a class their preparation is not quite as good as we wish it was, but we uncovered

some young fenoms. One little lad of eighteen answered redily all the questions we askt him in English, and then went over to our language expert and conversed well with him in both French and German.

Perhaps you have been shocked and distressed at times during this letter by the atrocious spelling of some of the words. Part of it is due to the lack of a good dictionary and part to biffing the wrong key, but part of it is malicious. Brander Mathews says it is all right, but I refuse to repeat what Arlo Bates says about it. It is an awful habit, but once one has formed it, it is almost impossible to break away.

Henry T. Gidley has been elected superintendent of the Fairhaven water works of New Bedford, and assumed his new duties February 17. Two of the most important engineering positions which Gidley has held are resident engineer on the Amherst dam, of the Amherst water company, and resident engineer of the Brookfield water company during the construction of the Brookfield dam.

—Mr. Franz Schneider, Jr., instructor in the department of biology and public health at the Massachusetts Institute of Technology and research associate in the sanitary research laboratories has severed his connection with the Institute to become sanitarian to the Department of Surveys and Exhibits of the Russell Sage Foundation. While at the Institute Mr. Schneider engaged in considerable outside work, being employed in the summer of 1911 in Kansas on special investigations into the bacteriology of the egg packing industry, and during the summer of 1912 on an investigation into the fundamental principles of ventilation. For the last year he has helped edit the *American Journal of Public Health*, and has lately been health officer in Wellesley, Mass. The latter work was part of a plan being worked out with Professor E. B. Phelps, also of the Institute, to build up an organization to operate the board of health work of small towns in the neighborhood of Boston, the aim being to give these towns a service comparable to that of the large cities, a service which they alone could not afford.

The Department of Surveys and Exhibits of the Sage Foundation is a new one, having been opened last October with Mr. Shelby M. Harrison in charge. Mr. E. G. Routzahn, well-known to sanitarians for his exhibit work and his connection with the anti-tuberculosis movement, is the associate director.—For several years past representatives of national organizations dealing with social and kindred problems have felt the need of a central clearing house for inquiries relating to social and civic exhibits. City surveys and investigations along specific lines have been bringing forward vital facts, and every such study is in itself a new demand for better avenues and methods of popularizing the information unearthed. The starting of this new social agency, however, means more than the mere centralizing of inquiries. Back of that it is a recognition of important changes in human relationships, due to tremendous industrial development, the city-ward movement, immigration, the influx of women in industry and other

causes. With these changes have come new problems calling for new diagnosis and study to learn whether the old machinery for individual and social advance is fitting the new needs,—whether the community has been keeping abreast of scientific progress. In the matter of surveys, it will stand ready to help local organizations make the preliminary diagnosis necessary to determine what should be the major lines of inquiry prosecuted; and will put them in touch with experienced investigators who can forward the work from the point where the diagnosis stops. In regard both to surveys and to exhibits it is not the purpose of the department to overlap the work of existing organizations, but rather to work out standards in coöperation with them and to place itself at their service. The work of the department in its first three months has been largely advisory—defining social surveys by specific illustrations, outlining the first steps toward the organization of representative backing groups for both surveys and exhibits, assisting in the selection of subjects to be covered, estimating probable costs, and so on. The demands made on the department by cities throughout the country have already been so heavy that it has been found necessary to add two new members to the staff. Mr. Zenas L. Potter, a graduate of the Universities of Minnesota and Columbia, and a man with special training and experience in sociology and economics, will aid the staff in these fields, while Mr. Schneider will devote himself to questions of municipal sanitation and board of health organization and administration.

Address Changes

George H. Gray, care of Western Electric Company, 463 West Street, New York City.—Percival L. Adams, 441 16th Street, Portland, Ore.—Daniel Belcher, care of Bemis Brothers' Bag Company, St. Louis, Mo.—H. H. Bennett, 246 Summer Street, Boston, Mass.—Lieut. Kenneth T. Blood, Fort McKinley, Portland, Ore.—John N. Boyce, Box 755, Anaconda, Mont.—Clarence J. Brown, care of James Chisholm & Son, Winnipeg, Manitoba, Canada.—John R. Carson, 199 Nassau Street, Princeton, N. J.—Richard L. Cary, Big Horn Collieries Company, Crosby, Wyo.—Thomas G. Chapman, Michigan College of Mines, Houghton, Mich.—John A. Christie, 34 Arnold Place, North Adams, Mass.—M. Stanley Clark, Cortez Associated Mines, Jacala, Hidalgo, Mexico.—Walter W. Clifford, 52 Milton Avenue, Hyde Park, Mass.—John F. Davis, 33 Arlington Street, Cambridge, Mass.—Chester L. Dawes, 30 Mt. Pleasant Street, Cambridge, Mass.—G. Wilbur Everett, 911 White Bldg., Buffalo, N. Y.—Marion H. Foss, Utah Apex Mining Company, Bingham, Utah.—G. M. Gadsby, Lock Box 1103, Pittsburgh, Pa.—G. M. Gilkinson, care of U. S. R. S., Thistle, Utah.—William F. Gilman, Tuscola, Ill.—R. Clifford Glancy, Box 149, Camp Hill, Pa.—W. S. Gordon, Jr., General Bakelite

Company, Perth Amboy, N. J.—G. H. Gray, Apartment 21, 430 West 119th Street, New York City.—Benjamin Hammond, Lloyd Insurance Company, Portland, Me.—Assistant Naval Constructor C. A. Harrington, Navy Department, Washington, D. C.—C. W. Harrub, 353 Elm Street, Arlington, N. J.—B. E. Hutchinson, care of Blair Open Hearth Furnace, Ltd., 20 Coptahall Avenue, London, E. C., England.—Frederick Jaegar, A. S. & R. Co., Maurer, N. J.—C. G. Jerden, La Fe Mining Company, Gaudalupe Zacatecas, Mexico.—R. L. Jones, Apartment 21, 430 West 119th Street, New York City.—William F. Jones, R. F. D. No. 1, Box 22 F., Tacoma, Wash.—G. A. Joslin, Apartado 387, Caracas, Venezuela.—Austin D. Keables, 171 Fort Hill Avenue, Lowell, Mass.—Mark E. Kelley, 36 Federal Street, Greenfield, Mass.—Carl G. Koppitz, 46 Glenaven Avenue, Youngstown, Ohio.—Christian Kurtzmann, Brockport, N. Y.—John E. Lenox, 38 Pine Street, Cambridge, Mass.—F. M. Loud, 88 Sherman Avenue, Newark, N. J.—George E. McKernan, A. C. Sternberg, Jr., Construction Company, West Hartford, Conn.—S. A. Mace, 19 Garland Street, East Lynn, Mass.—Henry H. Marshall, 26 Westland Avenue, West Hartford, Conn.—Valerio Masjoan, Fore River Shipbuilding Company, Quincy, Mass.—Andrew L. Matte, 178 West Canton Street, Boston, Mass.—Joseph Matte, Jr., 17 Follen Street, Boston, Mass.—Thurston C. Merriman, 352 Willow Street, Waterbury, Conn.—George Miller, Mexican Mines Company, Bolanos Jalisco, Mexico.—A. K. Mitchell, Canavan & Mitchell, 227-228 Pemberton Block, Victoria, B. C.—Norman C. Nichol, Carnegie Institute of Technology, Pittsburgh, Pa.—Harvey S. Pardee, 5804 Washington Blvd, Austin Station, Chicago, Ill.—J. Stewart Pearce, P. O. Box 294, Tulsa, Okla.—Joseph S. Pfeffer, The Waterproofing Company, Pemberton Square, Boston, Mass.—Morse W. Rew, 92 Harishof Street, Roxbury, Mass.—A. M. Rosenblatt, Tennessee Power Company, Murfreesboro, Tenn.—F. Schneider, Jr., Department of Survey and Exhibits, Russell Sage Foundation 31 Union Square, New York City.—Xanthus R. Smith, Weldon P. O. Montgomery Company, Pa.—Leo S. Stone, 15 Carlisle Street, Roxbury, Mass.—Norman H. Stubbs, Freilgrath Straits, 14 II, Hanover, Germany.—Michael Terry, 242 Dickinson Street, Springfield, Mass.—Stuart Thomson, 216 Union Street, Schenectady, N. Y.—Albert E. Thornley, 709 East Avenue, Pawtucket, R. I.—George N. Varney, 16 Highland Street, East Rochester, N. H.—George E. Wallis, 70 Franklin Avenue, New Rochelle, N. Y.—John A. Willard, Jackson Fibre Company, Bemis, Tenn.—Frederick B. Wood, Fifth Avenue, Park Heights, Baltimore, Md.—R. V. Zahner, 338 Broad Street, Sewickley, Pa.

1910.

JOHN M. FITZWATER, *Sec.*, Industry, N. Y.
G. BERGEN REYNOLDS, *Asst. Sec.*, 142 Highland Avenue, Somerville, Mass.

Course I

The following records have been received: John Ahlers, 174 Woodruff Avenue, Brooklyn, N. Y.:

Gradually mounting the ladder with the Turner Construction Company. At present superintendent on construction of a \$125,000-plant for the American Agricultural Chemical Company in Long Island City. Here I met two of the company's engineers, Trowbridge, '06, and Arnold, '08. If any of the fellows are in doubt about taking the fatal step and joining the benedicts, my strongest advice is—don't hesitate a minute. I never knew what fun work is and how happy a man can be until I settled down. Any classmate is welcome at any time.

—Now you are married, John Ahlers, don't neglect to keep that ladder in good repair—remember it's carrying twice the load it was designed for. If we could only believe what you tell us, there wouldn't be enough men in 1915 to pick a "single men's" baseball team from, to play the married men. We poor lonely devils get a whole lot of pleasure working selfishly to further our own ends—but if it's so much more fun to work for two, I guess we'd better try it when an opportunity presents itself—take a look at that ladder once in a while Johnny and go slow near the top.—Willie C. Arkell, Canajoharie, N. Y.:

In the home office of the Beech-Nut Packing Company, Canajoharie, N. Y.—Busy picking up information at present.

—John Avery, 45 Perkins Street, West Newton, Mass.:

Returned from Costa Rica the middle of October and it certainly is good to be back in civilization again. However, I don't regret the experience—but, never again! I am now with H. P. Converse & Co., of Boston who are building the Commonwealth Pier at South Boston. My official title is material man and I have my hands full working seven days a week.

—J. B. Babcock, Donnacona, Province of Quebec, Canada:

With the Amburson Hydraulic Construction Company as resident engineer of the construction of a hollow reinforced concrete dam to be used in connection with paper mill, etc., for the Donnacona Paper Company.—on the Jaques Costier River, P. Q., Canada. A short time ago my engagement to Miss Mildred Willard of Allston was announced.

—Congratulations, J. B.!—C. R. Benton: Notice returned from 50 Oliver Street, Boston, Mass., care of N. E. Tel & Tel. Co.—Kindly advise J. M. Fitzwater, Industry, N. Y., of new address.—H. N. Cummings, Millinocket, Maine, care of the Great Northern Hotel.—Please notify secretary of new address.—H. S. Domberger, 207 North Craig Street, Pittsburgh, Pa.: Instructor, mathematics and structural design—School of Applied Design, Carnegie Institute of Technology.—R. M. Gillis, 10 North Madison Street, Walla Walla, Wash.:

Am assistant on a small project at Burbank, Wash., irrigating about 14,000 acres. We are building a 1200 horse-power electric auxiliary pumping plant to back up the present hydraulic unit, also a lot of ditch, flumes and siphons.

—P. G. Laurson, 17 Gramercy Park, New York City:

Am still in the bridge game and like it. Spent the summer at the Elmira plant of the American Bridge Company, but am in New York again for a while. Ran out to South Dakota in October.

—Lasley Lee.—Sioux City, Iowa—last address. Notify secretary of change.—John Lodge, Media, Pa. Written from Beristain, Mexico:

I came down here last October on a tunnel job in connection with the Mexican Light and Power Company's Hydro-electric plant at Necaxa. They are increasing the capacity of the plant by running a string of tunnels across a series of mountain valleys to top the streams in them and conduct the water to the storage reservoirs. They had trouble with the last of the tunnels down stream, and the firm I was with New York (Jacobs & Davies, Inc.) took the job of finishing it. It is a beautiful piece of country that we are in, being about 4,800 feet high, cool at night and about 70° in the day time—altogether a much pleasanter spot to spend the winter than New York. I haven't anything exciting to impart about myself, being neither married nor in danger of it, but if they suddenly decide on intervention you will probably have an opportunity to write my obituary. We haven't been troubled by the rebels yet but if anything starts between the United States and Mexico it is liable to be a warm place for all *gringos*.

—Austin B. Mason, Big Creek, Fresno County, Cal.:

Have been working up in the Sierra Nevadas for the past year with Stone & Webster Construction Company on the Big Creek Power development. The last six months my job has been overseeing the engineering work, progress, etc., on a four-mile tunnel. On account of a strike on the works I was enabled to get away for a month and am now enjoying it in Boston.

—George L. Mylchreest, 106 Canfield Avenue, Hartford, Conn.:

Nothing startling to write about—am hard at work designing reinforced concrete buildings just now. That youngster of mine is nearly eight months old and is "some" boy.

—Harold L. Parsons, 170 Broadway, New York, N. Y., care of George W. Fuller:

Have been with George W. Fuller, sanitary engineer and hydraulic expert, since I returned from the Panama Canal last May. At present am resident engineer at Mt. Kisco in charge of repair work on their sewer system. We are reducing the amount of infiltration so that it will come within the requirements set by the city of New York.

—F. J. Pitcher, 28 Preston Road, Somerville, Mass.:

Am still with the bridge department of the Boston & Maine R. R. Have been here over two years and like it very much.

—Louis G. Rowe, 25 Pemberton Square, Boston, Mass., Room 1017:

Junior engineer with the U. S. army engineers doing river and harbor work. Living in "Dearo," Boston, and meet the other '10 men once in a great while.

—Ralph A. Smead, 197 Jefferson Street, Hartford, Conn.:

I am with Ford, Buck & Sheldon, Inc., consulting engineers, in steel and concrete work.

—Arthur Nagle has been resident engineer on several water works and sewerage contracts. He has passed the Massachusetts Civil Service examinations for assistant engineer and is a member of the Boston Society of Civil Engineers. In the fall of 1912 he started in business for himself as civil engineer and contractor of Milford, Mass.—Fitzwater & Ferry, constructing engineers, Waterville, N. Y.:

Waiting impatiently for a rainless and frostless spring so that we may continue and complete our state road contract started last year in Seneca County.

—R. G. Tyler, Capital Station, Austin, Texas:

Am still with the State Levee & Drainage Board. The army engineers who are doing extensive work along the Trinity River in Texas have asked me to come up to Dallas for a couple of weeks to help them get started off right in their computations, so will be there in February. We expect to organize a state engineering department in the next month or so but will write later about it. The bill is up at this session of the legislature.

—W. R. Waldo, 110 Grove Avenue, Winthrop, Mass.:

You will find me at the same old stand; *i. e.*, with Fred J. Ley & Co., Inc., Springfield, Mass., general contractors. Since July I have been on several buildings and general construction work for the Fisk Rubber Company, at Chicopee Falls, Mass., which work I find very interesting.

—Richard P. Watson, 44 Kilby Street, Boston, Mass.:

I have been in the insurance business since leaving the Institute at the above address. I see the fellows quite often and wish to be remembered to those I have not seen.

Course II

Don Williamson writes that he is rebuilding and remodeling the Maritime Nail Co.'s factory in St. John, N. B., and expects to get to Fort William, Ontario in the near future to build a big new factory there.—Charles Green has just been promoted to superintendent of E. B. Badger & Sons, Pitts Street, Boston.—H. W. Fleckinger is located with the Thompson Starrett Company, Pittsburgh, as an estimator.—C. D. Carey writes as follows:

At present I am inspecting engineer of the Bethlehem Steel Company. After March 1, I will be with the Simmons Boardman Publishing Company, 83 Fulton Street, New York City.

—R. N. Abbé writes that married life is certainly fine and the only life to live; advises all the "baches" to get busy.—H. G. Reynolds writes:

The General Electric Company, National Quality Division, bought out the company I was with last fall, and I am at the Tungstolier Works of the General Electric Company here in Conneaut. The works are going through a period of reorganization and I am enjoying my work as production man very much. We are building the biggest fixture factory in the world in Cleveland and we are all looking forward to next summer when we expect to get into our new quarters.

—Frank Bell has just been heard from for the first time in about a year, and writes:

I am at present working on the engineering force in construction of the Panama-Pacific Exposition here in 1915. I am at the present time making test borings for foundation purposes and other experimental work on testing piles, etc. The exposition is going to be a beauty from the architectural point of view, but they will have to go some if they want to be done on time. I left Hawaii February, 1912, and rounded the world and came out here six months ago.

—Charles J. Belden writes:

The principal news at present is that I have just returned from a honeymoon on the desert. I was married in Pasadena on February 1, and as a honeymoon we took an automobile trip through the desert and down by the Salton Sea. At present I am with the Union Gas Company.

—L. E. Briggs writes:

I have been experimenting in the educational film department at Thomas A. Edison's laboratory at Orange, N. J. My work consists in writing up scientific and industrial subjects, designing the necessary apparatus, and then performing the experiment while they are photographed by motion pictures. We hope to produce the educational and advertising films in large quantities soon.

Course III

R. L. Bartlett is at the Institute in connection with the assaying department.—R. L. Beales is associated in business with his father at Rockland, Mass., and gets time off, once in a while, to drop down to Boston to talk things over.—Brax. Bigelow writes as follows from Goldfield, Nevada:

I am sorry not to be able to accommodate you with the sparkling humor you desire. If there is anything humorous about running a machine and planting fifteen-inch stulls alone and unaided, I fail to see it. You with the nice soft job want to cherish it carefully, and don't let anyone flim-flam you into spending a couple of years dodging trouble in a mine. Could I have my way, I should hang the man who invented a one-man machine, higher than Haman; and the party ordering miners to do their own timbering, I should treat likewise.

—I have not been able to get in correspondence with Breyer or Chet Briggs; but hear several good rumors that they are progressing successfully.—“Papa” Burnet, writes thusly:

I guess I had better be on the safe side and head off that telegram “Collect,” especially as the new Course III 1910 “kid” confided to me that he is going to “Tech.” Therefore I must begin to save the pennies. In taking account of stock I find the new “kid” to be decidedly “live” goods and easily capable of keeping his father awake three or four nights a week. However, joking aside, his father is about the happiest person this side of Paradise. I gave up my position with the Oliver Iron Mining Company, in Minnesota last September, and am now with the A. B. Tenney Company, at the Malden Electric Plant. As things are now, I feel the change has been for the better. I am pleased to see that we are to get another “flow sheet” with word from all the fellows; and wish to express my appreciation of the work which you expend in giving me word of our classmates. P. S. I would be pleased to exhibit the “kid” to any of the fellows who would do us the honor to call at our temporary home. 10 Fitz Terrace, Chelsea, Mass.

—"Dutch" Crichton, Odebolt, Iowa, I was sorry to hear from his letter has been on the sick list, but his letter reads optimistically:

A letter will look good to me and I hope all the '10 miners are on top, and "makin her pay." Most of my time has been spent in keeping alive; but it is hard to kill us off, so I am feeling fine and hope to land a place to spend my time in a short while. Have been in Miami, Ariz., and found "old Welt" married. Was taken sick and after many troubles landed home. Am in the rapidly improving class now. I've noticed many changes in the bunch, especially that they are all finding a "Partner." I am almost a total abstainer, not from necessity but choice. P. S. Where is "Chet"?

—Eddy Goodspeed, State Bureau of Mines, Oregon Agricultural College, Corvallis, Oregon, writes "some" letter which shows his old time lust for geology and big game hunting:

Please excuse my delay in answering your letter in regard to this year's "flow sheet." I have been very busy for the past few weeks, and have not had time to do much on the side. However, I will now take time to give a short account of myself, to our "bunch."

My work this year is two-fold; teaching and research work in connection with the State Bureau of Mines. This latter work is very interesting. It consists in making tests on a great variety of samples that are sent in from all parts of the state. I have had a chance to learn something about clays and clay testing, as many of our samples are of that sort. Some of the samples and requests that we get are quite funny. For example, a little while ago a man sent in a piece of hemp well rope. He wanted to know if we could tell by analyzing the rope, whether there was any natural gas in this well. The college is very nicely situated on rising ground just west of the "city" of Corvallis. The Cascade Mountains are about thirty to forty miles east, the Coast Range only a few miles west of here. In clear weather I can see several of the higher peaks of the Cascades (such as Mt. Hood, over 11,000 feet; Mt. Jefferson and the Three Sisters, about 10,000 each) from my laboratory window on the second floor of the Mines Building. Next summer I hope to have a chance to see a little more of the state at close range. It is said that the hunting is very good in the mountains. If any of our "bunch" happen to find themselves in this region, I hope they will drop in and see me. Please remember me to my friends at M.I.T.

—"Bill" and "Hop" are digging gold nuggets still, and their two letters explain their views of life:

Have just dug your notification regarding "flow sheet" out of my desk, I had forgotten all about it. As far as any news from me is concerned, you know as much, or more about me, as I do myself. Am assistant manager with the Pearl Lake Mining Company, Schumacher, Porcupine District, Ontario, and am getting enough to live on. There is one course that the Institute should have, and that is "How to Save." I guess if I ever want to get away from Porcupine, I shall have to walk. The family are very well, thank you. Wishing the best of luck to all 1910 miners.

—"Hop" writes as follows:

I have just returned from a month's trip about the country, as I arrived in Bean Town at 4.30 a. m., and left at noon on Christmas Day I did not get a chance to see any of the old guard—my loss anyhow. Am still up here in the wilderness trying to look wise, and feeling otherwise. Truthful statement No. 1 for 1913. Porcupine seems to have had something wished on to it, for it just begins to show signs when something falls. The last jolt was in the form of a strike, starting in November and getting worse. It looks now as though there might be a general strike throughout Ontario in the spring. Congratulations for starting something, Perry, as the publication of the "flow sheet" is an event to look forward to. Best wishes to you and to all the boys.

—Fred Hurley is with the New Jersey Zinc Company, at their smelter at Palmerton, Pa. Received a long letter from him in which as usual he says nothing about himself; but Fred is getting there, as I understand he is now assistant chief of the spelter department.—Ray Jones “done make” a visit to Boston last month, and we had a good time together for several days. Ray is assistant “super” at the Sulphur Mining & Railroad Co., Mineral, Va., and is at present taking charge of several important problems which will ultimately change their methods of working.—Tommy Roper was seen in town last week, but have not seen him personally yet. He is still with the Shelby Shoe Company, Portsmouth, Ohio.—Henry Schleicher is still advancing to fame as an expert on electrostatic separation with the Huff concern at 60 India Street, Boston.—Prescott K. Wadsworth writes:

As we haven't a piece of 8" x 10" on the ranch, I guess I will have to get along with “something just as good.” To account for myself.—Am still in the paving business with the Warren Construction Company of Portland, Oregon, and engaged in country road work most of the time which keeps me on the move through the Northwest. When the aforesaid business affords a little “time off” I put it into good advantage on a fruit ranch which my brother and I have acquired near North Yakima, Wash. I spent last winter in Los Angeles and during the greater part of that time was with Van Warren. He is the only 1910 miner I have met since I ran across Dick Goodwin in Spokane when I first came west in 1910, and I can assure you we went over the mining course thoroughly, especially that part not to be found in text-books. Last summer was spent in Tacoma and later on over east of Seattle until the middle of November, and then in Berkeley, Wash., until the winter rains set in. As my work keeps me mostly in the country or very small towns, I don't often meet a Tech man, and Tech mail is a great treat as most of it seems to get lost in some of the numerous stages of being forwarded.

Am looking forward to a visit East another winter, and while the “Stute” is still as I remember it from four years experience. I find this a mighty good part of the country for Tech men. They all look prosperous and seem to be doing well, and look forward to seeing more of them here every year. With best wishes to all 1910 miners.

—Bert Wohlgemuth was afraid to write us a letter; but an announcement of the marriage of Mr. Bert S. Wohlgemuth to Miss Nellie Lustig on Tuesday the twenty-first of December, 1912, was received in due form. Congratulations, Wohlgie!—Perry, course secretary:

I spent the mid-year vacation in and around New York, visited the New Jersey Zinc Company's mine at Franklin Furnace which was very interesting on account of the special features which they employ both in the mining and milling of their unique ore. While waiting for the noon train to Boston I ran into Curt Webb and his father at the Grand Central Station. Curt had just come down from Alaska and I don't think he will be going back that way for as he said: “There is not much there for a fellow.” The only thing that has happened of interest to myself the last year was a venture in politics, when I made a run for the House of Representatives losing by a small margin in the 24th District, which is the largest in the state. Some excitement and plenty of fun may be found in this kind of game, and I would recommend it to anyone who is looking for some new experience.—I got it.

Course IV

Harold E. Akerly is still with the Eastman Kodak Company working in the construction department. Ak managed to find time to attend the big Tech celebration in New York in January.—Johnny Barnard is frequently seen partaking of the Boston Architectural Club's luncheons along with Johnny Gray.—Both are working for E. L. B. Graham at 20 Beacon Street.—Charlie Clark, who won last year's Rotch traveling scholarship was seen at the American Academy in Rome by Cleverdon in November. Charlie has been going through England, France and Italy on a motorcycle, and swears by this mode of travel. He now intends to stay in Rome for several months and room with K. Carpenter, '09.—Herbert E. Fowler was married to Miss Lillie Louise Crosman of Rochester, New York, November 19, 1912.—Phil Harris reports that he is the father of a fine baby girl. Phil is still with Guy Lowell, architect.—William Smith may be seen most any noon at the Boston Architectural Club giving his opinion upon the approaching Rotch competition.—Joe Northrup is still superintending the buildings of the Rice Institute at Houston, Texas, for Cram, Goodhue & Ferguson, architects.—Walter S. Spalding writes that he has several contracts for the government in Honolulu and that he expects several more.—Jimmy Noble writes that he is living in the suburbs of Chicago, raising chickens and a nine-pound boy.—Billy March has again left Boston and has returned to Mobile, Ala., and is in G. B. Rogers' office.—B. M. Petit is with Pond & Pond, architects, 1107 Steinway Hall, Chicago, Ill.—Den French is now with Stone & Webster.—J. L. Whitney is living in Greenwood, Mass., since he joined the ranks of the married men.—Ralph Hannaford is now with C. H. Blackall of Boston.—H. S. Cleverdon writes as follows:

The trip I took last summer was for architects; in fact, it was the annual trip of the American Institute of Architects. The trip was conducted by the University Bureau of Travel and upon their yacht the *Athena*. The itinerary took in all the places that were in any way connected with Greek architecture, so upon leaving Naples the first stop was Paestum, from here we went to Sicily where an abundance of Greek ruins were visited. Upon leaving Sicily more interesting places were visited. Greece was our next stop. Here the most interesting place is Athens. From Greece we went to Turkey, stopping at the various islands. After leaving Turkey we returned to Athens the day war was declared, and I was surprised to see so little excitement. From Athens we sailed up the East coast of the Adriatic, stopping at the islands and various cities in Austria. The party finally disbanded in Venice where Mr. Shattuck and I stayed several days. We ended the trip by going to Rome, Florence, Milan and Paris.

Course V

The sudden death of Bernard F. Courtney came as a shock to all of us,—the following account of the accident is taken from the *New York Herald*:

Falling into a doze in his chair, Bernard Courtney, twenty-three years old, moved restlessly and his elbow shoved his violin, which he had placed on the table, against the key of his unlit gas reading lamp in such a way as to turn on the gas full head, resulting in his death by asphyxiation.

—Courtney graduated with 1911, but most of his work was done with Course V 1910, and those of us who knew him as a classmate and later as assistant at the Institute will feel most keenly the injustice of this chance trick of fate. Courtney was distinctly individual in his personality and his personal friends lose a friendship that cannot be replaced. He completed his studies at the Institute in January, 1911, and at that time became assistant in organic chemistry at the Institute, holding this position until June, 1912. He then went to Washington in the service of the Bureau of Chemistry and was transferred to the New York laboratory of the service last fall. A letter from him intended for the REVIEW and received about a week before his death indicated that he was full of hope and ambition and enjoyed his work in New York. The funeral was held Thursday, February 6, at the Congregational Church in Hyde Park,—Course V was represented.

—Davis is still supervising brews from the Haffenreffer laboratory and reports that the Course V baby "can talk like a blue streak."

—Helen Fales writes from 149 East 54th Street, New York City:

My name is still the same and likely to be so—I'm afraid I cannot furnish a matrimonial sensation. Am working this year at the Babies' Hospital here in New York.—The work is a part of the Rockefeller Institute work.

—Mr. E. Kenyon Jenckes continues his Sphinx rôle.—Hedden is now with the Williamette Pulp & Paper Co. of Oregon City, Ore.—working for Olmstead (1903 M. I. T.) as chemist.—"Lordy" too has committed matrimony without our consent—he did let us suspect it though:

Congratulations are in order, for since January 15, Miss Elizabeth Wills of Corsicana, Texas, has been Mrs. G. R. Lord of 581 Magnolia Street, Beaumont, Texas. I am assistant superintendent of the Magnolia Petroleum Company with headquarters here, and like the work. Get in the lab. once in a while to do a little oil testing, but mostly am out from the old haunts of beakers and retorts. Best regards and remembrances to all old friends.

—"Doc" Schofield announces: "*big news*—Marion Porter Schofield born December 12, 1912." We are mighty glad to hear it "Doc,"—but don't let her be a co-ed, will you?—Trevithick writes from the depths of the Mississippi:

We are interested now in the fact that the river is trying to swipe nearly all our city front. The banks are all caving in badly. We want Uncle Sam to help us.

—R. W. Lewis is content to be classified in our 1910 chemical museum, although he would not consent to get his degree with us. He is located at Hotel Judson, 53 Washington Square, New York City:

I wish still to be classed with Course V 1910, although my claim to the title of "chemist" is shakier than ever. My work since leaving the 'Stute has had to do

with the design and manufacture of automatic machine guns. Just at present I'm directing some experimental work on a new gun. The work is interesting and not at all monotonous, and I'm afraid it's making me forget the little chemistry I managed to absorb (or is it *adsorb*?) at the 'Stute.

—"Laughing Waters" claims he has enough publicity in the Campbell soup ads. and refuses to say anything for publication—except at regular rates.

Course VI

Spencer Arend has been prospering in the lumber business since leaving the "'Stute" back in the sophomore year and is now in for himself under the firm name of Spencer Arend & Company, wholesale lumber, 161 Summer Street, Boston.—H. E. Beebe is assistant cashier of the Bank of Ipswich, South Dakota, and is doing contracting and corn raising on the side:

One of the best fields of corn in this part of the state.—Have hopes of getting my wires crossed with a certain young lady in the near future.

Still loyal to the Lowell Building expression.—Henry G. A. Black, 636 Rock Creek Church Road, N. W., Washington, D. C., has been studying law at George Washington University and is located at the U. S. Patent Office, room 242.

Saw some '10 men in town at time of the Hygiene Congress in the fall—mostly sanitary men, however. Regards to all the fellows.

—Hermann Behr, 20 Marlboro Street, Belmont, Mass., writes:

Hello Tec's! You see I keep jumping around. Last time I was in Beacon Falls, Conn. Well I hope to stay in this dear old "Bean Burg" for a few years. Am at present in the drafting department of Stone & Webster.

—George Connor, 1910 East 55th Street, Cleveland, Ohio, writes:

Still busy on industrial lighting jobs for National Electric Lamp Association, engineering department. Saw Bursar Rand in Nova Scotia last summer, five days after he had received check for one million dollars, part of gift to Tech from the anonymous Mr. "Smith."

—Howard Collingham, 36 Francesca Avenue, Somerville, Mass.:

Still driving a benzine buggy and still have hopes of going back to the "'Stute." By another year I think I'll have something more material than hopes. Saw some of the boys at the '10 dinner.

—Robert L. Dodge is in the engineering department of the Bell Telephone Company, 1230 Arch Street, Philadelphia, and much interested in the work—also "as much unengaged as on the night of the Course VI dinner."—Loren N. Downs, Jr., 18 Burr Street, Jamaica Plain, Mass., with the commercial engineering department of the N. E. Tel. & Tel. Co. making a special study of telephone rates.—Herbert Gott, 530 West 112th Street, New York:

E. M. Potter and myself are still working for the New York Railways Company. We've got one of the finest little apartments you ever saw. Potter is getting thin from worrying about not having enough excitement in this city. Don't forget to drop into the Tech club to see us.

—Arthur L. Harding is with the McCook Electric Company, McCook, Neb.:

After leaving the "Stute" joined the Telluride Power Company, Telluride, Colo., and held position as superintendent of operation when I left April 1, 1912, to become manager of the McCook Electric Company.

—Frank A. Hayes is with the Robins Conveying Belt Company, Park Row Bldg., New York City.—Stuart Henderson, 404 Gray Bldg., Wilkinsburg, Pa., writes:

Still hanging around "Smoky Town" and getting a living. Am the only 1910 man at the Westinghouse Company as "H. V. S." (Taylor) is in Europe now nobbing with the nobility. This is a much maligned town and is really a very satisfactory place to live in when you become accustomed to it.

—Frank Hodges, 170 Hicks Street, Brooklyn, makes the following ante-election remarks:

(1) Engaged in the important work of making a living; (2) not married; (3) voting for Taft; (4) Good-by.

—John A. Holbrook, Westside Road, Milton, Mass., is with the Boston Transit Commission:

At present boring two or three holes under the city. The work is far from electrical but interesting and instructive as far as civil engineering goes.

—Edward S. Howe, Westinghouse Elect. & Mfg. Co., 201 Devonshire Street, Boston is:

On the road in New England, as a service engineer—unmarried; with no prospects

—George W. McRae has been with the engineering department of the A. T. & T. Co. since graduation, 15 Dey Street, New York City.

—Carroll Shaw was married on June 25, 1912, to Miss Natalie S. Howe of Kingston, Mass., and is now living in Cleveland—still with the National Lamp and manager of the Permel Sales Company of Warren, Ohio.—Robert I. Hulsizer, 1903, North Street, N. W., Washington, D. C., writes:

The patent business in spite of the political uncertainty, is booming and is keeping me on the jump.

—George S. Humphrey, Knight Consolidated Power Company, Provo, Utah:

Official title is assistant engineer of above hydro-electric generating and distributing company. Design and construction work. Also have been married since early June.

—Francis B. Silsbee took his master's degree in June, 1911, and after a summer abroad started in with the Bureau of Standards and is still there "providing Frankie Laws with Standards." Address 1924 H Street, Washington, D. C.—Fred R. Lufkin, 43 Summer Street, Watertown, Mass., is with Walter B. Snow, '82, publicity engineer.—Stanley M. Smith, is with the Electric Commission 136 St. James Street, Montreal, Canada.—Charles M. Smith is with the New York Edison Company, 92 Vandam Street,

New York City, after two years with the General Electric Company.—George T. Southgate, entered the service of the Houston Lighting & Power Co. as electrical engineer after graduation, and has been with the company in that capacity ever since. Address, 1502 Commerce Avenue, Houston, Texas.—H. M. Trueblood, Jefferson Physical Laboratory, Cambridge, Mass., is a graduate student in physics at Harvard, doing research in thermodynamics.—Lewis S. Southwick, last heard from in Portland, Oregon, *en route* to New York and then Altoona, Pa., from Boise Idaho, where he has been since last July with the Idaho-Oregon Power Company. Was with the Charlestown Gas & Electric Co. for a year after graduation.—Albert K. Huckins is with Stone & Webster on building construction in and around Boston:

After leaving "Stute" put in a year in the repair shops of the Bay State Street Railway Company, intending to learn the street railway business, but after a year got in with Stone & Webster, and like the new kind of work very much.—Was on the construction of the new central station for the Boston Elevated Company at South Boston and am hoping by spring to have a chance to help in the building of the New Technology.

—C. W. Wallower writes from 293 Triangle Street, Buffalo, N. Y., concerning his work:

Was appointed division leased wire supervisor of A. T. & T. Co. upon graduation with headquarters at 15 Dey Street, New York. On January 1, 1911, was shifted to Troy, N. Y., to become chief test boardsman, and on July 1, 1911, was appointed district plant chief A. T. & T. Co., Buffalo, N. Y., where I now am. Well satisfied, excellent prospects, working hard.

—John Myrick was married April 19, 1911, to Miss Sibyl Berry of Newtonville, Mass., and is living in West Newton, Exeter Street, with wife and daughter. Since graduation John has been with the New England Tel. & Tel. Co. and now holds a position in the traffic department of that company.—Allen Gould 2042 East 115th Street, Cleveland, Ohio:

Am assistant to engineering manager, Peerless Motor Car Company—another one of those who have strayed from the old course work. Plenty of engineering, but only a sprinkling of electrical work. Have had a number of lively Tech reunions here and at Akron and see more ahead. Carroll Shaw and George Connor are the only other E. E.'s. Rad Preston, Art Truett, Tyler Carlyle, C. P. Monto, Jack Tuttle and occasionally others of 1910 turn out for the Northern Ohio parties.

Course VII

C. T. Pomeroy spent his first year out as bacteriologist to the Board of Health of Plainfield, N. J., and after a year there resigned to accept the position of health officer at Summit, N. J., where he succeeded Hoyt, '09.—He also confesses his marriage, on September 25, 1912, to Miss Marion E. Burnham of Lewiston, Maine. Present address 18 Summit Avenue, Summit, N. J.

Course X

John "Mike" Bierer has "no news of any value for the other fellow-sufferers, but things have been exceptionally interesting and pleasant for me." Can it be that Bierer is going to be married?—Dud Clapp was heard from just too late for the last REVIEW, and has refused to comment further:

The only news is that having deserted my native course I am now endeavoring to hold down an electrical job amid the Georgia pines. I shall soon have a high position, when I start climbing poles.

—All right, Dud, but you needn't get up in the air about it.—And to think that R. W. "Jake" is now assistant manager to Mrs. R. W. ———. On January 15 the firm went under new management and Jake says: "*We* are now keeping house." (*Italics are ours.*) "It is fine to be married but an awful job to get up in the morning and crank the furnace."—Lunt is in Mayburg, Pa., in the interest of E. P. Badger & Sons of 75 Pitts Street, Boston. Address, Tionesta Valley Chemical Company, Mayburg, Pa., for next three months.—Spaans has changed his address to 26 Wisconsin Avenue, Somerville, Mass.—R. R. Taylor is living at 46 O'Neil Street, Hudson, Mass. He says:

I am glad that something has been started to make us fellows feel a little more in touch with one another. When a person asks my occupation I reply that I am a chemist, but may the powers that be forgive me for the statement. As a matter of fact I use the knowledge and ability gained in the engineering part of my course more than I do the chemistry. The manufacture of rubber goods is fraught with a vast number of interesting problems. Many unfortunately, do not hold the promise of financial return in close enough perspective to allow of being worked out in a factory laboratory.

—From distant China comes a most interesting epistle with a laundry check at the top which, being interpreted, is "Chihli Industrial College. R. O. Fernandez, professor of chemistry." The professor writes to his old friends thus:


Boston is a nice little place for which to be homesick, but that is about as far as it goes. Tientsin has its attractions even if its only offerings in the way of a theater is a moving picture show at a dollar Mex per chance. It would surprise you a bit if you could get a glimpse of this town with its tram lines, steel bridges, macadamized roads, schools, parks, factories and enormous businesses. In our college we are introducing a course in electrical engineering, and without doubt by next year there will be a laboratory fully equipped for experimental work in industrial chemistry.

China in the north has caught much of the spirit which has been the secret of the more rapid progress of the southern Chinese, but politics here are in very bad shape. I have it on very good authority that the Republican government at Peking is permeated with the same rottenness which brought the old monarchy to grief. President Yuan seems to have the only level head in the whole crew. The election at New Year's may help to correct the dismal situation at the capital, the new Senate, if such a thing is possible, being able to alleviate the very general disaffection among the provinces. Yuan, of course, will remain President. There is a national pride and patriotism among the younger Chinese which is gradually supplanting the old race prejudice which used to express itself so completely in that familiar sentiment *yang kuei* (foreign devils), and evidences of the change are numerous in this

college. Most of the students belong to a patriotic society of their own organization, the effect of their desperate motto translated being "Give us China in her five provinces, or death." They have equipped themselves with rifles and drill under the instruction of an army officer every day from four until half-past five. This, I feel is but a straw, but it's going with the gale, which is doing a little sweeping in the direction of an enormous and progressive nation in Asia. It's some satisfaction to be here, and I think that the action that I missed in Boston when the Red Sox came across, or in New York on election night, was more or less compensated by the night I spent last winter when Tientsin was looted and burned. Stray bullets whistling by are very exciting even if you don't happen to be the target. I spent that night in the clock tower of the main building ready for a marathon across country if things got altogether too exciting, but the fires in the city died down considerably by daybreak and by ten o'clock the rifle shots had subsided to a stray popping. In the afternoon I lit out for the foreign settlements on the motor bike.

We had our first flurry of snow today, and my pet squirrel has had a fine time playing with a snowball we gave him this morning, but he is still a little bit "leary" of chow from my hand since I gave him a five grain quinine pill to chew on the other night. Health and nerve fine and hope yours the same. Are you yet engaged, married, or divorced, Geg? If so, or not, come to China and you'll avoid or forget it,—guaranteed. Remember me to any of the fellows who happen to be located in New York City, and write again sometime; REVIEWS are scarcer out here than "Analysis Correct" in a quantitative note book.

1911.

ORVILLE B. DENISON, Sec., Hotel Standish, Worcester, Mass.
 Note change of address of secretary.

The proverbial leopard with his unchangeable spots is certainly the direct antithesis of your humble secretary, whose place of abode seems to change with each succeeding issue of the REVIEW. Yes, "Gus" Barker, variously known as "Charlie," "Herman," "Fritz," etc., and the secretary have moved from 7 Wachusett Street, and are now living at the Hotel Standish. Members of 1911 will be even more welcome in the new "headquarters" on account of greater freedom enjoyed by the occupants and increased entertaining facilities. Yes, we always keep some of that on ice, Mike. (The effect of this joke will be lost unless the name *Greenleaf* appears on the REVIEW's mailing list.)—Prevalent stringencies of markets are certainly not limited to the financial world just now, for there is certainly a serious one in the 1911 matrimonial market, judging from the dearth of marriage notices received by the secretary of late. Just one notice has been received since the last class letter appeared in the January REVIEW. On Saturday, February 1, occurred the marriage of William J. Orchard and Marie Frances Singler in Roslindale. Best wishes, Bill!—As a result of the recent canvass of the class by the secretary, a number of interesting letters and cards have been received. Only about one third of the members have sent back the cards filled out, however. This is a rather bad showing. *What's the matter?*—H. P. Ireland is located in Binghamton, N. Y., and writes:

On leaving my position as assistant at the 'stute I came out here last June to work for Dunn & McCarthy, manufacturers of "ladies and misses fine shoes."

Bierer 1911, had already been with them for a year and I was soon joined by Powell, 1911, and Cary, Gale, Eicher and Barry, all of 1912. At the start we constituted what was officially termed the "Betterment Department" with A. H. Thompson, 1908, at the head; but we soon gloried under the title of the "Seventeen Devils."

I made a couple of trips to Rochester for the firm and there happened to meet "Joe" Fuller, but was unfortunately not able to attend a dinner of the Technology club of that city, which took place while I was there.

—"Bill" Burleigh is located in Lancaster, N. Y., near Albany and is in the repair shops of the New York Central. He writes:

The shop job I have now, fulfills all the longings of my youth for dirt and grease. Reckon I'll have an oil separator attached to the bathing facilities at my abode and go into competition with John D. as a side-line. I am on air-brakes and the job consists of taking a lump of cinders and grease and finding some sort of a valve therein. This is simple enough but when the valve is found it must be either fixed or thrown away. The complicated part of it is finding a suitably lonesome spot to throw it away in.

—"Zeke" Williams, at last reports, was in Chicago with the Sanitary District of Chicago. From the windy city he sends the following cheery words:

Right after getting my degree in June, 1912, I beat it for the wilds of Nebraska and for three months worked in Omaha as foreman of the steam-fitters' gang in the stock-yards of Swift & Co. I had a fine bunch of ex-convicts working for me, but after three months on the killing-floor, etc., I decided I was not cut out for a packer so resigned. Next I worked as a concrete engineer for a concrete firm in Omaha. I was making good progress when in the middle of October I received a telegram saying that I had been appointed a sanitary engineer in the Sanitary District of Chicago. Babbitt, Course XI, is here with me.

Here's some live news! While in Omaha, "Swift" Nash dropped in on me and we had a great old time together. "Swift" is the same old boy, and is a helva good fellow." "Pop" Hufsmith has written me from Port Arthor, Texas, where he is the mechanical engineer of the Texas Oil Company. You probably know that "Doc" Moore is still in Texas doing very well indeed. Doc, Jr., was born a little over a year ago and "Doc" says the boy is a "whale."

—In closing "Zeke" wants to be remembered through the secretary to all 1911 members and expresses the hope that we will soon have a reunion. As a postscript he adds:

There seems to be an "epidemic" of marriages in our class. Here's hoping a few will stay single and keep me company. "Swift" and I decided we were doomed to be old bachelors, but perhaps a few more drinks would have changed the light.

—S. L. Hayes is with the Millville Manufacturing Company, manufacturers, bleachers and dyers of cotton piece goods, in Millville, N. J.—Had a nice long letter from A. K. Wardwell, a 1911 man, shortly after the "post-card campaign." He was obliged to leave school on account of a nervous breakdown, but after absolute rest, as prescribed by his physician, he is now "a new man." He is at present in the maintenance of way department of the Boston & Maine, located at the North Station in Boston. D. F. Mahoney, a former 1911 man, is with him. He closes by saying:

The fact that the Mahoney chicken and this chicken are behind their classmates in life's race does not mean that they are always going to be behind. We are coming

back strong and you fellows had better look out to see that *you* are not left behind instead of *us*. Nineteen eleven will never be ashamed of the fact that we were once members of the class. They will be proud of it.

Here's to the health, wealth, prosperity and happiness of each and every '11 man!

—That's the proper spirit—and remember this comes from a man who was only actively associated with the class for a little over a year. There's food for thought!—Another splendid letter received by the secretary, was that of E. L. Woodward, Course VI. He is a man who during his Institute career was more or less in the background, not through choice, but really through necessity. His letter, however, is brimming over with the finest kind of Technology spirit. He is now with the Boston & Maine at Concord, New Hampshire, in their air-brake repair shops and is rapidly "making good."—Had a Christmas card from "Bill" Warner and Harry Waterfall, also a card from "Johnny" Scoville from Jamaica.—"Fat" Merrill sent in one of his typical "breezy" letters from Cajon, California, where he is located with the Salt Lake Route in railroad engineering. His ambition, he says, is to "eventually become a magnate on the Boston, Revere Beach & Lynn R. R., or some such monumental railway system." He also says he is doing finely for a tenderfoot, having stepped on cactus bushes but three times and missed rattlers but twice. He closes with:

I went gunning for wampusses the other day. If you don't know what they are, ask any S. I. (sivil engineer.)

—Good luck, Fat!—Another newsy letter was that received from A. W. Brooks under the caption of the Port Richey Company, Port Richey, Fla. This company "booms" grapefruit and orange groves, and other agricultural lands. He says there is good money in the fruit business, but that it takes time and some money, and advises not to try it without *both*. He expects to be married soon. His fiancée is Miss Beatrice Tuck of Winchester, Mass.—Also had a pleasant letter from Harold Robinson. Just at present he is with Swift & Co., in Chester, Pa., as inspector, where he intends to remain until April. In closing he admonishes the secretary to keep "Charlie" Barker from going wrong. [Note. That's one of the hardest things I have to do, now. But I'm doing my d—est! "Dennie."]—Had a nice, long letter from Don Stevens last month. As usual, it was full of Technology cheer. It follows, in part:

Phil Kerr has joined our ranks. He is located at the Goodyear Rubber in Akron. We had a dandy week-end together only a short while ago. Johnny Wilds surprised me by coming out to inspect the Peerless factory. He is traveling for the Factory Mutual. He shouted me to a fine feed and then we had him spend an evening with us. He said when he left that he was coming back directly for a two weeks' visit, but I am much disappointed that he hasn't materialized. I ran into "Hank" Smith in Boston at Christmas. He had a girl with him, but he pushed her into Metcalf's and wouldn't let me see her, so I am only left to guess who it was. "Joe" Fuller is wearing a moustache, gold-headed cane and green silk socks and tie so you may imagine that General Bakelite has taken a fancy to him. "Joe" is a

picture of masculine health and beauty—saw him, also, at Christmas time. “Wilkie” is leading a life of indolent luxury in Bachelor’s Apartment, Brookline. “Dick” Ranger has been writing for *Photo Era* and is running the Tech Typewriting Bureau.

Dick Gould “& Co.” have returned from Essen in Germany and have located in Poughkeepsie as an assistant sanitary engineer.

I have left the engineering department here [Peerless Moto Car Company] and am now assistant to the factory manager and secretary of the operating board. The future looks uniformly satisfactory although I see no peaks in the prosperity curve. I played “Mr. Smith” here at the last Ohio Alumni banquet.

I hope all the fellows are “coming through” on the Alumni Fund. Most everyone ought to send a dollar a year, if nothing more. Do they realize that every little helps?

—Don’s letters are always eagerly awaited by the secretary.—R. W. Cushing, Course VI, has joined the Goodyear “fraternity” in Akron, and says in a recent letter:

I am not mixing or stretching rubber but I am simply taking care of the light and power end.

—“Dippy” Allen writes from Philadelphia:

Just wait a couple of years, O. B., and I will write you a *real* letter (and I won’t ask for money as you always do in your letters.) With the exception of a few little drawbacks like small pay and long hours, I have the best job of anyone of the class.

—“Doc” Davis, the Course VI “war-horse,” springs the following:

Am to be married on January seventh. Otherwise everything is as it was.

—Suppose he’s went and done it by now!—“Jim” Duffy is the same old Jim! Everyone at the Calee Works now daily visits his desk to see Jim’s latest epigram. A new one appears daily and Jim is surely some epigrammist. Outside of that he’s all right!

—“Ken” Faunce says “the most welcome insult he ever had is the one he gets pay day but it doesn’t last long enough.”—A. V. de Forest writes on the return-card:

Married and happy, Coal cost like **!! but eggs are lower! Rah for Technology!

—“Bill” Foster is back at the ’stute after an M.S. degree.—Gordon Glazier says:

The class baby can walk and weighs 33 pounds. Her first intelligible words were: “Damn it!”

—John P. Hart, Course VI, announces the arrival of George Porter Hart, December 15, 1912. Congratulations!—V. P. Klapacs, ex-Course VI, has now graduated from Harvard Dental School and is now practising his profession in South Boston.—Malcolm Price announces the birth of a daughter, Virginia, on December 18. More congratulations!—Foster Russell opines:

No time-clock; no drawing-table; no greasy overalls; no boiler tests—just Kilowatt-hours; load factors; maximum demands; and happiness!

—Isador Sisonksy, as he was known while at the ’stute, has legally changed his name to Edward Sisson.—“Russ” Wells says he is

"still hitting the rails, and pursuing the 'Golden Fleece.'"—P. D. White, representative from Sweden, complains that he is "compelled to live in a town where there are more men than women"—Stamford, Conn.—The "post-card campaign" resulted in 227 replies and of nearly six hundred letters sent out. This is a fairly good showing, but there is certainly room for improvement. The following letters have been returned as unclaimed on account of wrong address: Kester Barr, C. L. Bartlett, J. B. Cheney, M. Coffin, C. P. Echeverria, Francesco Fernandez, G. B. Forristall, Joseph Gershberg, R. L. Hayward, W. W. Johnson, W. B. Jones, G. C. Kenney, T. S. Killion, A. H. Kimball, J. F. Mathewson, Abram Morris, C. A. Schafer, L. A. Stover, H. S. Waite, Lawrence Watts, S. W. Wilson, W. C. Wilson and H. J. Wood. "Has anybody here seen Kelley?" In other words, do *you* know where they are? Please write!

Important Notice to Members

The secretary would like to learn the whereabouts of the following members of the class:

Arthur K. Adams—V. L. Ahearn—John A. Allan—E. S. Anderson—Sarah R. Anderson—J. T. Arms, Jr.—H. S. Arnold—J. L. Bagg—F. R. Bailey—D. C. Barton—S. E. Bates—M. S. Beecher—W. S. Boynton—P. M. Bramhall—L. N. Brody—T. J. Burke—S. M. Burroughs—W. R. Cannon—E. J. Carey—Georgiana Charleston—Chushen Chow—F. R. Churchill—H. W. Churchill—A. C. Clavell—A. B. Cohen—Conor Coppinger—I. L. Corcuera—B. F. Courtney—F. W. Corill—I. C. Creighton—R. S. Damon—A. C. Davies—E. R. Davis—J. S. Dean—Louis de Florez—Joseph Desloge—Marcel Desloge—J. J. Devlin—J. G. Diaz—W. R. Diaz—R. N. Doble—C. C. Dudley—J. E. Dunphy—C. W. Eaton—C. P. Echeverria—R. W. Egan—L. E. Etting—P. V. Faragher—Francisco Fernandez—W. N. Flanders—P. R. Fleming—E. M. H. Follansbee—W. E. Fortune—S. A. Francis—A. W. Frank—R. W. Frost—J. P. Gallagher—J. J. Gannon—G. T. Garnsey—J. H. Gavin, Jr.—A. T. Gay—Joseph Gershberg—S. V. Givrigian—A. F. Glazier—Jacob Goldberg—L. R. Golden—W. W. Goodhue—E. W. Goodwin—A. D. Gring, Jr.—S. A. Guthrie—C. H. Harrington—J. E. Harrington—J. D. Hassett—Russell Hastings—M. W. Hedden—J. J. Higgins—G. E. Hodge—Hans C. Hohn—M. W. Hopkins—E. C. Howe—B. C. Huber—W. B. Ives—R. C. Jacobs, Jr.—D. J. Jenkins—F. C. Jewett—W. W. Johnson—C. C. Jones—C. L. Jones—W. B. Jones—H. P. Joyce—J. E. Kelley—J. J. Kennedy—Edward Kenway—Max Kushlan—Thomas Larkin—P. G. Lanman—Pedro de Souza Leão—R. W. Lesser—Max Levine—Nathan Levy—R. W. Lewis—J. S. Long—E. E. McAvelly—R. B. McEwen—Russell Mack—W. F. McKnight—T. F. McLoughlin, Jr.—C. A. McManus—J. D. McNamara—Albert

McNaughton—N. F. McNeil—C. B. Magrath—C. A. Maguire—D. T. Mahoney—W. H. Martin (I)—J. F. Mathewson—B. P. Mathew—R. F. Maxcy—L. M. Merrill—L. G. Metcalf—W. B. Miller—H. O. Mills—Raj Kishore Misra—L. E. Monge—Abram Morris—Robert Morris—A. R. Nagle—E. A. Nash—S. M. Niles—A. Nimick—T. B. O'Hearn—Ricardo Pacheco-Lara—S. A. Patchett—Armand Pauvalid—P. H. Pearson—R. S. Pease—L. M. Perrin—J. B. Pierce, Jr.—C. S. Pratt—F. A. Pretzinger—J. A. Proctor—G. W. Rapelli—L. R. Rapelli—W. G. Rhoades—Webster Richardson—Benjamin Robinson—R. V. Roche—J. A. Rush—F. P. Ryder—L. M. Sandstein—T. M. Saqui—Hall Sargent—C. A. Schafer—R. E. Schatz—C. A. Schellens—Henry Schreiber, Jr.—Lewis Schwartz—E. A. Schwarz—A. E. Scharkey—Abraham Shohan—R. J. Simonds—G. A. Sinnicks—Harrison A. Smith—W. L. Smith—H. G. Soule—H. D. Soule—Isidore Spector—J. A. Starbuck—J. C. Stevens—G. P. Sullivan—R. S. Thurston—G. W. True—A. W. Underhill, Jr.—G. A. Upton—C. A. Valverde—R. D. Van Alstine—J. B. Walcott—W. R. Walker—L. W. Walz—A. K. Wardwell—H. P. Wasserboehr, Jr.—G. S. Watson—J. C. Watson—F. E. Watts—Lawrence Watts—R. B. Wells—S. N. Whitney—G. B. Wilbur, 2d—C. S. Williams, Jr.—W. J. Wilson—W. J. Winninghoff—W. S. Woods—V. P. Yacoubian—Shuichi Yamaguchi.

NOTE. The above list represents the members from whom nothing has been heard since June, 1911. The secretary will consider it a personal favor if any word is received concerning these members—either from the members themselves or from other members who may know of their whereabouts. Such information must be secured if the class address file is to be kept anywhere near straight.

Address Changes

NOTE. The following list contains only the names of members who have sent in replies—either the printed cards or letters—to the recent letter from the secretary.

J. A. Aaron, Westinghouse Club, Wilkinsburg, Pa.—June Adkinson, 10 Fairview Street, Dorchester.—H. S. Alexander, 98 Paige Avenue, Akron, Ohio.—D. P. Allen, 214 South 50th Street, West Philadelphia, Pa.—John F. Alter, 233 East Huron Avenue, Chicago, Ill.—R. Y. Althouse, 116 Logan Avenue, Denver, Colo.—C. S. Anderson, care of Utah Power & Light Co., Telluride, Colo.—Robert E. Anderson, 307 Broadway, Cincinnati, Ohio.—H. A. Angell, 68 East 10th Street, Portland, Oregon.—P. S. Avery, 120 Tremont Street, Boston.—H. E. Babbitt, 756 East 37th Street, Chicago, Ill.—Charles M. Barker, Hotel Standish, Worcester, Mass.—Carl S. Barnes, 554 Fifth Street, Niagara Falls, N. Y.—G. W. Barnwell, 40 West North Avenue, Atlanta, Ga.—Royal Miner Barton, 519 Pontiac Avenue, Auburn, R. I.—Stacy C. Bates, Box

50, R. D. 2, Ventura, Cal.—E. J. Batty, 37 Hancock Street, Pawtucket, R. I.—M. B. Black, 145 East Fourth Street, Oswego, N. Y.—E. H. Blade, 2617 Devisadero Street, San Francisco, Cal.—Suren Bogdasarian, 735 Hopkins Street, Buffalo, N. Y.—Alberto M. Bombini, Vis Serra 4, Genoa, Italy.—J. R. Bowman, Billerica, Mass.—Arthur E. Bradley, Mount Vernon, Iowa.—A. W. Brooks, Port Richey, Fla.—G. A. Brown, Y.M.C.A., Box 7, Manchester, N. H.—P. K. Brown, 141 State House, Boston.—M. B. Brownlee, Jr., care of Franklin Electric Mfg. Co., Hartford, Conn.—Paul Burdett, 72 Kilby Street, Boston.—W. S. Burleigh, P. O. Box 671, Lancaster, N. Y.—P. E. Burnham, 720 North Street, Logansport, Ind. (until April 1, 1913). After then, at home, 40 Victoria Street, Lowell, Mass.—George H. Burrows, 299 South Union Street, Burlington, Vt.—P. L. Caldwell, Merrimack, N. H.—James R. Carpenter, Black Hawk, Utah, Via Price.—O. V. Chamberlin, 227 Hamilton Avenue, Paterson, N. J.—Orliff van H. Chase, 118 Newtonville Avenue, Newton, Mass.—O. S. Clark, 30 Sydney Street, Dorchester.—W. H. Coburn, 225 Newbury Street, Boston.—R. T. Cole, Worcester Academy, Worcester, Mass.—A. M. Coleman, 173 Mt. Auburn Street, Cambridge.—E. A. Collier, 421 Lincoln Street, Eugene, Oregon.—J. P. Constable, 3 Spruce Street, Boston.—F. G. Cooke, 1536 17th Street N. W., Washington, D. C.—L. C. Cooley, 26 Stetson Street, Brookline.—Rufus Crane, care of Baker University, Baldwin, Kans.—G. B. Cumings, Box 231, Palmer, Mass.—G. B. Curwen, Livingston Hall, Columbia University, New York City.—R. W. Cushing, 45 Marshall Avenue, Akron, Ohio.—P. A. Cushman, Trinity College, Hartford, Conn.—F. H. Daniels, Jr., 214 Salisbury Street, Worcester, Mass.—Burgess Danon, 98 Paige Avenue, Akron, Ohio.—H. C. Davis, Jr., Fort Moultrie, S. C.—H. M. Davis, 26 Beals Street, Brookline.—W. C. Davis, Jr., care of Brazil Railway Company, São Paulo, Brazil.—A. B. de Araujo, 8 West 109th Street, New York City.—Orville B. Denison, Hotel Standish, Worcester, Mass.—K. W. Dennett, Heerā, Oahu, Honolulu, care of Koolan Fruit Company.—W. B. Denton, 1724 Gaylord Street, Denver, Colo.—A. L. de Romana, 225 Seward Place, Schenectady, N. Y.—Henry F. Dolliver, 21 Farewell Street, Newport, Rhode Island.—C. W. Dow, 1598 Woodward Avenue, Detroit, Mich.—Norman Duffett, 258 Fourth Street, Niagara Falls, N. Y.—James F. Duffy, 22 Portland Street, Worcester, Mass.—J. Howard Dunlap, 98 Paige Avenue, Akron, Ohio.—G. W. Elder, care of India Rubber Company, New Brunswick, N. J.—C. S. Ell, 109 Lexington Street, East Boston.—Rudolph Emmel, Ludwig, Nevada.—E. N. Fales, care of Stone & Webster, Keokuk, Iowa.—K. W. Faunce, 207 North 4th Street, Allentown, Pa.—J. C. Firmin, 251 Patent Office, Washington, D. C.—L. G. Fitzherbert, 25 North Pearl Street, Albany, N. Y.—A. V. de Forest, care of New London Ship & Engine Co., Groton, Conn.—W. D. Foster, 225 Newbury

Street, Boston.—R. D. Francis, 457 Centre Street, Newton, Mass.—A. Frigon, 56 Beaver Hall Hill, Montreal, P. Q., Canada.—Herbert Fryer, 1877 Hyde Park Avenue, Readville, Mass.—George Fuller, 83 Adams Street, Rochester, N. Y.—D. P. Gaillard, Culebra, Canal Zone, Panama.—J. L. Geismar, 30 East 9th Street, N. Y. City.—O. J. Gilcrest, Railway Commissioners Department, General Electric Company, Schenectady, N. Y.—D. McF. Giles, 210 Newbury Street, Boston.—L. G. Glazier, 4 Egremont Road, Brookline.—J. S. Gravely, 29 Northumberland Road, Pittsfield, Mass.—James O. Greenan, care of Nevada Hills Mining Company, Fairview, Nevada.—K. Greenleaf, 5 Dartmoor Street, East Cleveland, Ohio.—T. H. Haines, 153 Hemenway Street, Boston.—E. R. Hall, 429 Brookline Avenue, Boston, Fenway Station.—H. M. Hallett, care of Unit Construction Company, Liggett Building, St. Louis, Mis.—R. T. Hanson, 40 Monroe Place, Brooklyn, N. Y.—L. J. Harrigan, 50 Church Street, Room 969, New York City.—F. C. Harrington, R. C. & S. Ry., Raleigh, N. C.—J. F. Harrington, 20 Matcher Street, Albany, N. Y.—J. P. Hart, 533 East 17th Street, North, Portland, Oregon.—S. H. Hartshorn, Box 185, Millinocket, Maine.—R. T. Haslam, 1331 West 112th Street, Cleveland, Ohio.—L. T. Hemenway, 143 Kent Street, Brooklyn, N. Y.—J. A. Herlihy, 24 Park Street, New Haven, Conn.—A. N. Herman, 208 East 69th Street, New York City.—A. S. De W. Herreshoff, 6 Walley Street, Bristol, R. I.—Walter H. Hildebrand, 920 Margate Terrace, Chicago, Ill.—Bancroft Hill, 712 Keyser Boulevard, Baltimore, Md.—C. F. Hobson, 164 Holyrood Avenue, Lowell, Mass.—C. W. Homeyer, Jr., Burton, Texas.—W. B. Hopkins, 116 Grover Avenue, Winthrop Highlands.—C. L. Hufsmith, care of Texas Oil Company, Palestine, Texas.—J. C. Hunsaker, U. S. Navy Yard, Charlestown.—Otis Hutchins, care of Carborundum Company, Niagara Falls, N. Y.—Roy D. Huxley, 246 Newbury Street, Boston.—H. P. Ireland, care of McCarthy Shoe Mfg. Co., Binghamton, N. Y.—H. G. Jenks, West Acton, Mass.—C. R. Johnson, 83 North Union Street, Akron, Ohio.—M. H. Judd, Dalton, Ga.—A. H. E. Kaufman, 33 Pine Street, South Manchester, Conn.—Paul Kellogg, 54 Anderson Place, Buffalo, N. Y.—Edward Kennedy Y.M.C.A., Fairmount, W. V.—Mark C. Kinney, 17 Gramercy Park, New York City.—Victor P. Klapacs, 879 Broadway, South Boston.—Edward H. Kruckemeyer, 907 Andrews Bldg., Cincinnati, Ohio.—Harry E. Lake, 153 Harvard Avenue, Allston.—T. R. Lathrope, East St. Louis, Ill.—J. H. Lawton, 824 West Street, Wilmington, Del.—A. F. Leary, 55 Collins Street, East Boston.—H. P. Letton, Aleda Apartments, Trenton, N. J.—H. A. Lewis, care of Shepley, Rutan & Coolidge, 122 Ames Building, Boston.—H. S. Lord, 2158 West 21st. Place, Chicago, Ill.—R. H. Lord, 3048 Fulton Street, Chicago, Ill.—R. P. Loud, 107 Main Street, Nantucket, Mass.—N. A. Lougee, 233 Union Street,

Schenectady, N. Y.—M. J. Lowenberg, 18 Fabyan Street, Dorchester.—J. L. McAllen, 328 Hassal Street, Portland, Oregon.—W. R. McCune, 17 Battery Place, New York City (after April 1, 1913.)—J. D. Mackenzie, Department of Geology, M.I.T., Boston.—R. G. MacPherson, 1495 Baldwin Street, Waterbury, Conn.—H. L. Manley, Central Y.M.C.A., Cumberland, Md.—W. H. Martin (VI.), care of American Tel. & Tel. Co., Engineering Department, 15 Dey Street, New York City.—R. H. Mather, Windsor Locks, Conn.—C. H. S. Merrill, Cajou, Cal. (temporary).—A. C. Metz, Mina Reforma, C. Cienegas, Coah., Mexico.—T. F. Meyer, 629 Lincoln Avenue, Detroit, Mich.—C. H. Mills, care of Besse-Clark Company, Pittsfield, Mass.—F. A. Moore, Box 180, Pittsburg, Texas.—R. E. Morse, University Club, Altona, Pa.—Morris Omansky, 34 Auburn Street, Boston.—W. J. Orchard, 250 East Hanover Street, Trenton, N. J.—F. Osborn, 2d, Box 1306, Great Falls, Mont.—T. B. Parker, 105 South State Street, Salt Lake City, Utah.—L. A. Patrick, 16 Walden Street, Cambridge.—W. J. Pead, Jr., Y. M. C. A., Lowell, Mass.—T. Polhemus, 188 Evanson Street, Winnipeg, Manitoba.—O. D. Powell, care of Dunn & McCarty, Binghamton, N. Y.—I. R. Pray, 10 Concord Street, Natick, Mass.—Edwin Pugsley, 77 Everit Street, New Haven, Conn.—M. W. Pullen, 2110 North Calvert Street, Baltimore, Md.—H. B. Pushee, 261 Dixan Place, Akron, Ohio.—R. H. Ranger, Box 132, Back Bay, Boston.—S. M. Ratzkoff, U. S. M. A., West Point, N. Y. (after June, 1913, U. S. Army.)—C. G. Richmond, 300 Winthrop Avenue, Revere, Mass.—P. A. Rideout, Public Roads Office, U. S. Department Agriculture, Washington, D. C.—G. E. Robinson, 96 Durocher Street, Montreal, P. Q., Canada.—H. L. Robinson, 17 Winthrop Street, Winchester, Mass.—J. C. Rogers, care of Choctaw Lumber Company, Broken Bow, Okla.—A. H. Rooney, Box 842, Wilmington, N. C.—Foster Russell, 2702 East Eighth Avenue, Spokane, Wash.—Frank Russell, Jr., 31 Wendell Avenue, Pittsfield, Mass.—W. C. Salisbury, 5430 Woodlawn Avenue, Chicago, Ill.—E. C. Savage, 731 Buena Vista Avenue, San Francisco, Cal.—S. M. Schmidt, 337 Charles Street, Boston.—H. R. Schulze, 401 Boston Building, Honolulu, T. H.—O. R. Schurig, 22 Manchester Street, Pawtucket, R. I.—J. H. Scoville, 1069 Beacon Street, Brookline.—S. H. Scribner, 158 Westford Street, Lowell, Mass.—R. A. Seaton, Manhattan, Kans.—O. H. Shenstone, 657 Burrard Street, Vancouver, B. C., Canada.—W. J. Simonds, 52 Shawmut Avenue, Marlboro, Mass.—Isidor Sisonsky, 116 Chelsea Street, East Boston.—C. J. Sittinger, 52 Hanks Street, Lowell, Mass.—Harold A. Smith, 15 Albert Street, Manchester, N. H.—H. S. Smith, 1112 Center Avenue, Bay City, Mich.—S. P. Spalding, Fort Hancock, N. J.—R. M. Spencer, 161 Tremont Street, Hartford, Conn.—R. R. Stanley, 1148 People's Gas Bldg., Chicago, Ill.—D. R. Stevens, care of Peerless Motor Car Company, Cleveland, Ohio.—O. W. Stewart, 75 Milton

Avenue, Hyde Park, Mass.—E. F. Stimpson, Fabricord Works, Newburgh, N. Y.—H. W. Stucklen, 26 Esmond Street, Dorchester.—E. M. Suess, Apartado 20, Saltillo, Mexico.—To-Tan Sun, 211 East Packer Avenue, South Bethlehem, Pa.—E. M. Symmes, Box 101, Kenil, N. J.—F. C. Taylor, care of Rochester Railway & Light Co., Rochester, N. Y.—M. R. Thompson, 215 High Street, Perth Amboy, N. J.—E. C. Tolman, 84 Highland Street, West Newton.—J. A. Urquhart, 218 Blodgett Street, Manchester, N. H.—H. W. Van Hovenberg, 739 Boylston Street, Room 339, Boston.—E. D. Van Tassell, Jr., 12 Edgehill Road, Winchester, Mass.—E. C. Vose, 350 Cabot Street, Newtonville, Mass.—N. S. Wade, Y. M. C. A., Athol, Mass.—W. W. Warner, suite 117, Corner Tenth Avenue and Birch Street, Vancouver, B. C., Canada.—H. W. Waterfall, 1703 Wallace Street, Philadelphia, Pa.—L. B. Weeks, U. S. M. A., West Point, N. Y.—E. I. Weisberg, 90 Pearl Street, Somerville, Mass.—W. P. Welch, 474 Avenue E., Bayonne, N. J.—P. V. Wells, care of Factory Mutual Company, 31 Milk Street, Boston—Noyes Weltmer, Miami, Ariz.—W. C. West, 1148 People's Gas Co. Bldg., Chicago, Ill.—L. L. Wetmore, 30 Pearl Street, Mt. Vernon, N. Y.—E. J. Whitcomb, 358 Broadway, Winter Hill, Mass.—C. N. White, 266 Albion Street, Wakefield, Mass.—P. D. White, 109 Bedford Street, Stamford, Conn.—H. H. Whithed, 808 Beeker Street, Schenectady, N. Y.—W. O. Whitney, 95 Bayard Street, New Brunswick, N. J.—H. R. Wilbur, Manager, Union Light & Power Co., Franklin, Mass.—G. B. Wilkes, 1464 Beacon Street, Brookline.—H. D. Williams, 39th St. Pumping Station, Sanitary District of Chicago, Chicago, Ill.—I. W. Wilson, care of Aluminum Company of America, New Kensington, Pa.—Frank A. Wood, 148 Sixth Avenue, Brooklyn, N. Y.—R. O. Wood, 11 Lowell Road, Concord, Mass.—C. A. Woodruff, 153 North Willow Street, Waterbury, Conn.—J. C. Woodruff, 160 East 22nd Street, Bayonne, N. J.—E. L. Woodward, 57 Pleasant Street, Concord, N. H.—E. M. Young, Y. M. C. A., Chelsea, Mass.—R. E. Zimmerman, 11 Wellington Road, Brookline.

1912.

RANDALL CREMER, Sec., Mass. Inst. of Tech.

Those of us who were not fortunate enough to be present at the reunion celebration in New York and to share in the festivities there, have no doubt taken pleasure in reading of the part our class took as the infant member of the Alumni Association. Instead of holding a luncheon with the other classes on the day assigned, the 1912 committee decided to have in its place a dinner the evening before at Healy's Restaurant, in hopes of obtaining a larger attendance. Following is a letter from William H. Lange, chairman of the committee, who is to be commended on the suc-

cess of the undertaking:—"The dinner came off at the place and time appointed. Those present were: Ernest Nicholson, Brooklyn, N. Y.; H. C. Damon, Paterson, N. J.; James Cook, East Orange, N. J.; L. W. Cooper, Rockville Center, L. I.; H. H. Brackett, Bloomfield, N. J.; H. W. Coddington, Newark, N. J.; Ralph Stone, New York City; L. A. Matthews, New York City; J. I. Murray, New York City; L. M. Sandstein, Chicago, Ill.; Henry Foley, Palmer, Mass; J. A. Applequest, East Orange, N. J.; N. A. Hall, Newark, N. J.; Hamilton Merrill, Newark, N. J.; Aksel Pedersen, Hartford, Conn.; L. T. Cummings, Bloomfield, N. J. and W. H. Lange, New York City,—seventeen in all. After the dinner, the crowd went to the Technology club, arriving there at about 9 p. m. At the club we found three other '12 men, Fred Barker, Jr., D. A. Tomlinson, and Clarence McDonough. McDonough said he tried to get to the dinner but forgot the address and brought up by accident at a saloon on 60th Street, run by one Healy, but not the right one. At the dinner I read a letter from Carpenter, saying that the class fund had reached the high-water mark of \$22.00, but not much enthusiasm was shown, we had some songs at the dinner, Aksel Pedersen playing the piano. On the way to the Technology club, the crowd made itself hoarse by giving a "We are happy" and the "regular M. I. T." alternately all the way, which was mostly subway; but no one was tapped on the shoulder. At the Technology club were a lot of the professors too; Spofford, Allen, Barrows, Miller, Cross, and others that I did not know.

The following addresses ought not be used any more, as the fellows do not live there and are not known there: Louis de Florez, 21 East 32d Street, New York City.—Louis Grandgent, 409 West 15th Street, New York City.—I. S. Joseph, 14 East 60th Street, New York City.—Salvador Rodriguez, Jr., 133 Grace Church Street, Portchester, N. Y."

The following are new addresses: H. F. Lehman, in care of Goodyear Rubber Company, Akron, Ohio.—Hamilton Merrill, Y. M. C. A. Newark, N. J.—J. C. Freeman, 803 Lafayette Avenue, Brooklyn, N. Y.—N. A. Hall, 822 De Graw Avenue, Newark, N. J.—H. L. Woehling, 207 North 4th Street, Allentown, Pa.—A. W. Yereance, in care of McArthur Bros. Co., Clanton, Ala.

We can see no possible explanation for the decided slump in matrimonial stock this time. With the near approach of summer a reverse movement might reasonably have been expected. Nevertheless there is not a single wedding to report, and only four engagement announcements, interesting as they must be to us all. At any rate here they are: Miss Elsa Bertha Eichler of Dorchester to Walter P. Green, Course I; Miss Alice F. Lee, University of Chicago, '11, to F. C. Loweth, Course I; Miss Elizabeth Burke, University of Chicago, '12, to Philip C. Jones, Course VI; and Miss Lucy Mears Goynes of Boston, to Charles C. Jones, Course I.—

Over six hundred copies of the class letter were sent out last November, to which only one hundred and eighty replies have been received at the present day. Each one of us should do all he can to help bring in the others, for as time goes on it will probably become more difficult to get in touch with these men, when once communication is broken.—The Course XI "Round-Robin" in the devious course of its wanderings has at last drifted in the direction of Boston, and thanks to the indulgence of our friend Bill Collins we are permitted to show portions of it to the whole class, believing that they will be curious to learn what the "Plumbers" have been up to. Already the budget of letters has assumed considerable proportions, and no doubt by the time the collection has made the circuit and returned to the starting point the parcel post will have to be employed. Unfortunately the mean velocity of the "robin" is extremely low, and in consequence some of the "news" is decidedly not new. But we will pass over little items like Ferguson's compassion for "poor Woodrow Wilson" (his letter was written last summer) and be glad for the rest. Just remember that the first ones are rather stale.—H. F. Ferguson, Pennsylvania Railroad, Fort Wayne, Ind.

For the first few weeks I traveled all over this division, from Crestline, Ohio, to Chicago, putting in sidings, running curves and all such maintenance of way work. You ought to see me putting in a spiral easement curve.

Lately, however, I have not gone out of town, as the company is elevating the track through the city, putting in four new subways, and building a new station. I do most of the field engineering connected with such construction work. This is much more interesting than maintenance of way work and I get a chance to play boss myself.

However, I think I will stick to our good old sanitary work, so am planning to leave here before long.

Just a few days ago de Florez came in to where I take my meals, so we cheered each other up considerably. He is out here running some tests on an ice-making machine but expects to return to New York shortly.

—As has been mentioned in an earlier number, Ferguson has carried out his intentions and is now with the Illinois Water Supply Commission at Urbana, Ill.—Here are some real wild-west experiences told by Zeke Williams, who started out with Swift & Co., at Omaha, Neb.:

My first job was putting a union in a water line right over the killing floor, where I was covered with blood from the "raging" bulls and steers. I felt a bit woozy for a few minutes, but in a few days would wallow around in the blood and even took a crack at knocking the cattle on the head.

We have already told of Zeke's movements after leaving there. He is now an assistant sanitary engineer in Chicago.—Arch Eicher, with Dunn and McCarty at Binghamton, N. Y., tells of some of the other fellows who went there at the same time:

Link Barry is learning to "last" shoes,—Gale is in the packing room,—Cartwright in the "finishing" shoes, Cary in the cutting leather,—Powell in the sole leather,—Ireland in the stitching room among 860 girls,—imagine it!

The following comes from C. F. Smith who began work with Swift & Co., Fort Worth, Texas:

My experience up to this point shows the "all-aroundness" of Course XI. I started in with figuring stresses in concrete floors, T beams, etc. Then I was able to figure boiler tests without having to be told what a water tube boiler is. Then I was sent to the chemical laboratory and was able to tell sulphuric acid from NaOH. And now I can see more interesting work on the horizon. I had to send in an estimate a few days ago of what it would cost to start a bacteriological laboratory in which to test our water.

But, oh, you Fort Worth! Of all the blank, blank, blankety places I was ever in! I believe there are about three plastered houses in the city, and very few of them have more than one story.

—This from Mowry, St. Joseph Mo.:

Swift & Co. certainly seems to be a good place to get experience, at least, because they have to do a little of everything. This plant is next to Chicago in size and looks as though it would be the biggest some time in the future, by the way it is developing now. The by-product part of the business is most extensive, practically nothing being allowed to go to waste except the pigs' squeal, as they say here.

After eight months separation from the 'Stute I can say that fortune has treated me very much on the level. I am in the mechanical department of the local plant, this department handling all the new and repair building construction and general plant repair work.

They have given me a very good opportunity to acquaint myself with nearly all branches of the work. After about three months and a half of general work, I was placed in charge of the construction of a new three-story brick and reinforced concrete tank house and since finishing that I have been in charge of the drafting room. However, I have been very lucky in not having to do any drawing myself, but instead spend most of my time on preparing estimates and figuring material for proposed work.

I have met a great many Eastern people out here and several college men among them. I ran across one fellow whose home is here in St. Joe who went to Tech three years—"Swifty" Nash by name—a great friend of Zeke Williams. He would have been a 1911 man.

—And here is a word from Reynolds:

As for myself, I am in the subway, right in the old Back Bay. Since May I have been on sections II and III, *i. e.*, on Boylston Street from Massachusetts Avenue to the Public Library. Another section is just being opened from the Public Library to Berkeley Street. I have had to do the ordering and inspecting of the placing of the reinforcing. Also get the cross-sections of the excavation, concrete, etc., and check part of the forms for the concrete. It has been about the busiest time I ever put in. For a time I worked from 7.40 a. m. till 9 p. m., with an hour for lunch at noon and just time to eat in the evening. There were a couple of Sundays thrown in also, just to make it interesting; but worst of all was being stuck twice during that time, and once since then, for three successive shifts,—8 a. m. of one day till about 5 p. m. of the following day, with an hour or two's sleep in the small hours of the morning on one of those beds made of a couple of chairs and a board.

—Here is a little bunch of news from Course III, some of it no doubt more or less out of date: D. F. Baker has been working in the blast furnace department of the Dayton Coal & Iron Company at Dayton, Tenn. He is planning to return to the Institute in the near future to complete his course here.—R. Bermudez has gone to his home in San Pedro Sula, Honduras, Central America, and is working for the mint of Honduras.—J. L. Bray is acting

as private assistant to Professor Richards in the mining department.—H. B. Davis is in the testing department of the Standard Steel works at Burnham, Pa.—L. B. Duke is mining engineer at the Vulture Gold Mines at Wickenburg, Ariz.—C. Fallon and P. M. Tyler are assistants in chemistry under Professor Hall.—H. R. L. Fox is in charge of some engineering work for the United Fruit Company, address 120 Duke Street, Kingston, Jamaica.—L. H. Goodwin is mining engineer with the Quincy Mining Company, Hancock, Mich.—A. R. Hammond has been working underground in the Coeur d'Alene district of Idaho, and at last accounts expected to secure work in the mill of the Utah Apex Mining Company, at Bingham, Utah.—L. A. Hechinger is engaged on the work of boring for the new Technology site in Cambridge.—E. L. Homan went to work underground for the Copper Queen Company at Bisbee, Ariz. Recently he has gone with the Champion Copper Company, at Painesville, Houghton County, Mich.—R. R. Langer, H. D. MacDonald and A. H. Means are finishing their course at the Institute.—J. H. Morley is working under his brother in the Archaeological Institute at Santa Fé, N. M.—F. W. Osborn is with the Ajo Copper Company, Ajo, Ariz. He also is expected to return here soon.—S. E. Reed, H. H. Sharp and F. E. Starr went with the American Smelting & Refining Co. of Mexico. Originally they were put at mining work at Velardena, Durango, but they have been recently shifted, and Reed is at Santa Barbara, Chihuahua.—W. H. Triplett entered into engineering work with the Phelps-Dodge Company, and is believed to be at Nacozari, Sonora, Mexico.—E. C. Van Sykel is with his brother in the concentrating department of the Pennsylvania Steel Company, at Lebanon, Pa.—R. E. Whipple is back as assistant in the metallurgical department.—O. K. Wiessner is working for the American Zinc Company, at Mascot, Tenn.—W. J. Seligman is assisting in the physics department.

J. L. Barry, 3d, left Dunn & McCarty some time ago, and has been spending the winter in the Maine woods.—H. F. Clark is now assistant city engineer of Redlands, Cal., and writes of the cold wave that did so much damage out there.—Albion R. Davis is in the engineering department of the Peerless Motor Car Company, at Cleveland, Ohio.—Ernest W. De Witt is in the foundry of the Blake Knowles Pump Works, in East Cambridge, Mass.—Harold Greenleaf is now in the engineering department of the Chicago, Milwaukee & St. Paul Railroad.—A. V. Guillon is a graduate apprentice with the Westinghouse Company at Wilkinsburg, Pa.—R. L. Kocher is now instructor in architecture at Pennsylvania State College, in charge of that department there.—E. M. Mason is an engineering apprentice with the Westinghouse Company at East Pittsburgh, Pa.—O. M. Merry is conducting experimental work on cooking and heating by electricity for the Hartford Electric Light Company, 266 Pearl Street, Hartford, Conn.—

G. L. Paullis is under the district engineer of the American Steel & Wire Co., Waukegan, Ill.—D. H. Radford is employed by a wholesale millwork company, at Duluth, Minn.—F. R. Robinson, Jr., is assistant to the experimental engineer of the Pennsylvania Steel Company at Steelton, Pa. He writes:

Van Sykle and I are the only '12 men down here,—but Van is some crowd.

—H. E. Soulis is a student engineer with the Bell Telephone Company of Pennsylvania, at 1230 Arch Street, Philadelphia.—H. H. Stevens is a stove maker at Gardiner, Maine.—S. S. Stevens is working in a coal mine at Holden, W. V.—Dugald Stewart is a draftsman in the signal department of the N. Y. N. H. & H. R.R. at New Haven, Conn.—R. C. Stobert is with the Hardie-Tynes Company of Birmingham, Ala., engaged in the manufacture of steam engines.—C. B. Vaughan is a draftsman for the Otis Elevator Company, at 600 West Jackson Boulevard, Chicago.—R. E. Wilson is with the Associated Factory Mutual Fire Insurance Company, at 31 Milk Street, Boston.—A. G. Hildreth is completing a course at Bowdoin College, Brunswick, Maine.—The following comes from G. A. Ryan, Big Creek, Cal.:

As you probably know I married the day after graduation. The day after that memorable day I started for California. The job I was going to, was nearly one hundred miles west of Fresno, and most of this distance was traveled by stage, which took me three days. I have been hard at work ever since.

The climate here has been fine so far, but we are expecting heavy snow from now on. I might remark that it seldom, if ever, rains here, but snows instead, even in midsummer.

—F. C. Loweth writes from Chicago:

After getting home last June I went on as an instrument man for the C., M. & St. P. R. R. in the construction of a large new yard which that road is building about fifteen miles outside of Chicago. The yard has over a hundred miles of track, two "humps," a thirty-stall concrete and brick roundhouse, 440-ton coaling stations and all of the other necessary buildings. My work was chiefly with the buildings.

In September I was sent to Perry, Iowa, as inspector and supervisor of concrete work in the construction of a thirty-stall roundhouse and terminal buildings at that point. I was then transferred back here to Chicago to take a position as resident engineer on track elevation. The job is divided into two residencies, and the other resident engineer is from the University of Maine. All of the other men on the job are from Western colleges,—the East does not seem to be well represented out here, especially in railroading.

—The following lines come from Baltimore, presumably from Jesse Hakes, though unfortunately the writer forgot to sign his name:

I am still plodding along with the Baltimore & Ohio and the future looks very bright. As a matter of news I would say that John Hall has just joined us here at the house, and has started in work for the Maryland State Board of Health. It certainly seems good to have an old friend near by.

—Hall himself says:

I'm finding this work very interesting and much worth while. Maryland is a mess sanitarily, and there is plenty of work for our young little bureau to do.

—This from “Heine” Partridge at Akron, Ohio:

As you probably have heard, I came here with the Firestone Tire & Rubber Co. about the last of October and was in their mechanical department. This was mostly work in the drafting room and not madly exciting. About the first of the year a new department was started called the branch efficiency department, and I am now in that and like the work very much. We have charge of all the branches and service stations as to their general welfare and equipment, and as there are at present twenty-three branches and many more service stations and agencies this covers quite a field all over the country.

When in Akron I help make layouts for shops and building equipment, and when out on the road, superintend construction, look for trouble, try to remedy it, and report general conditions.

We are having a strike here now. It has been quiet enough, but practically the whole factory is closed. The I. W. W. are trying to get a hold here, but wiser heads are trying to influence the men to arbitration and to keep out the undesirable agitators.

I see G. H. Rhodes every day, and, in fact, for some time eight of us had dinner together every night. Dick Cushing, Art Truette, Sprowls, Wright, Mitchell, O'Brien, Lehmann, Sheppard, '11, and several more of the Course II bunch are here in town.

—Art Campbell sends the following, from Manila, P. I.:

I graduated in civil engineering last year at the Sheffield Scientific School of Yale University and started immediately for the far East, visiting Hawaii and Japan. At present I am working with the Bureau of Education in Nueva Vizcaya, a non-Christian province of northern Luzon. Hongkong is two days from Manila and I expect to do up China soon, then start for home by way of Europe, taking in the points of interest on the way. This part of the world is extremely interesting. You will probably see me back for some reunion of the near future.

—Several members of the class have been back in Boston during the past few months. Among them Allen Reid and “Doc” Sloan are surveyors on a power development project in the mountains of North Carolina, near Jefferson.—Payson is still engaged in hydraulic measurements at Glens Falls, N. Y.—McNeil is an inspector for the B. & A. R. R. at Albany.—A. C. Albee is on some dredging work in Jamaica Bay, Long Island.—Sandstein was back for a few days, “on his way” from Chicago to Los Angeles where he is going to begin on some harbor work.—Dave Benbow comes to town every once in a while in the course of his business trips.—Rube Doble, strangely enough, seems to have given up engineering and is now cultivating his voice again.—Zip Bent has come back to work with the American Storage Battery Company.—At the same time fellows are leaving continually. Mc-Kenney has gone out to Houghton, Mich. with the Houghton Electric Light Company.—Lenaertes is now working for Stone & Webster on the Keokuk dam project.—Noyes has gone to Chicago with the Sullivan Machinery Company, 122 South Michigan Avenue.—R. H. Fox is now employed with the Fafnir Bearing Company at New Britain, Conn. He writes from there:

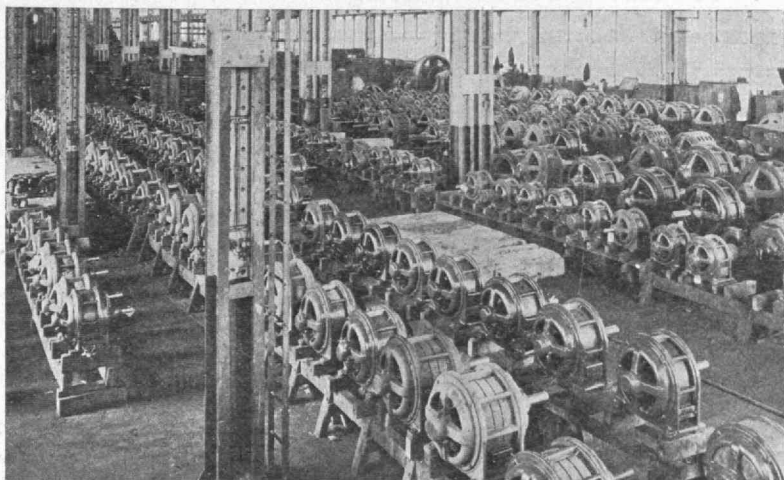
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Letters addressed to the following men have been returned unclaimed. Information in regard to any of them will be gratefully received. Roy E. Coram, Ricardo E. Duprey, Joseph Gershberg, P. C. Henry, Matsuo Hidezi, G. B. McFaul, L. W. Richardson, W. P. Richardson, L. A. Salinger, B. B. Sircar.

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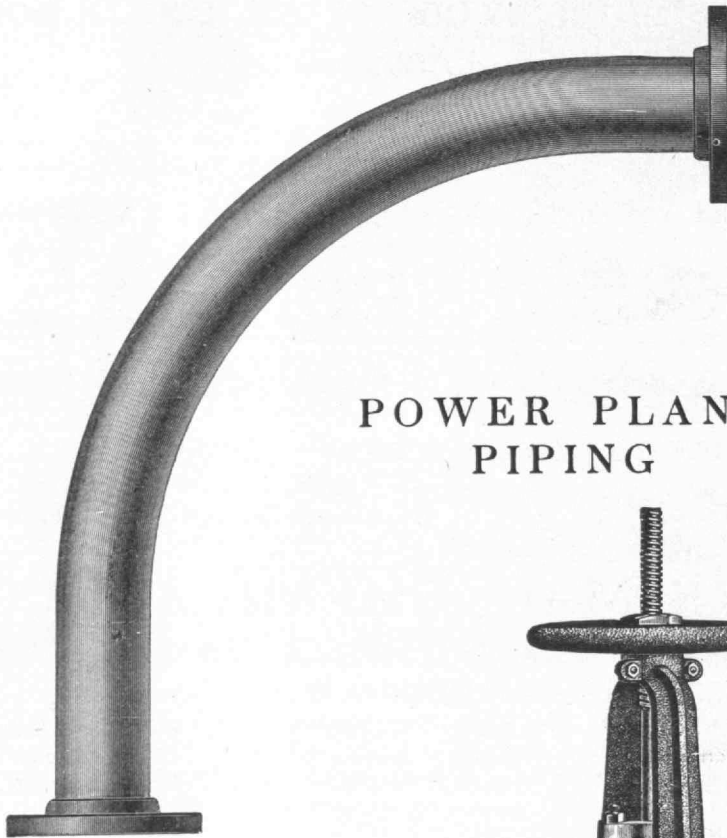
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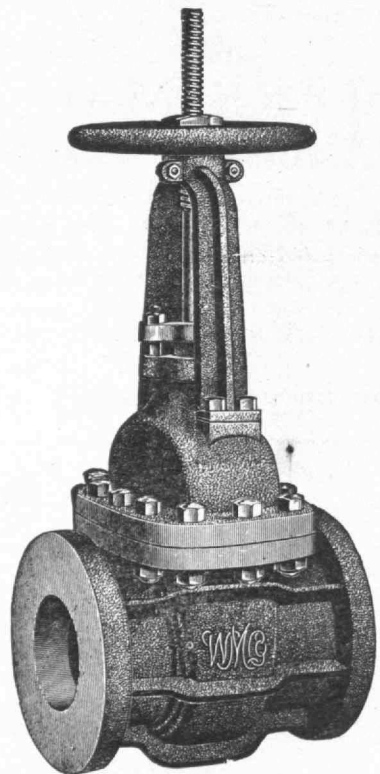
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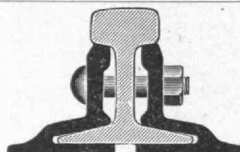
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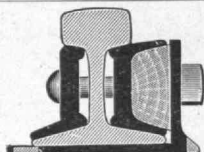
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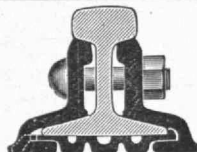
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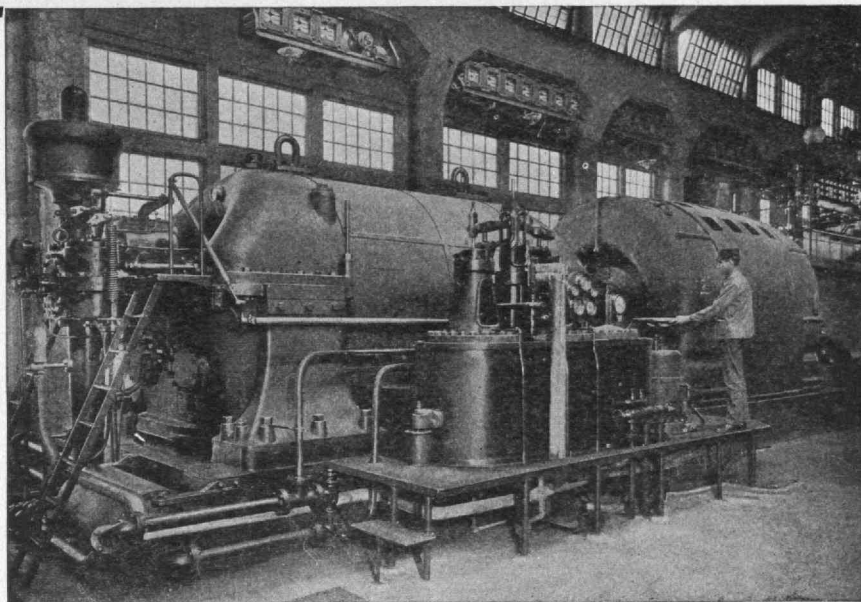
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for the men in their shops. They know by experience that the accuracy of these tools insures perfect work, while their excellence of design increases the efficiency of the men. When you need fine mechanical tools for yourself or for your plant consult the Starrett Catalog No. 19.

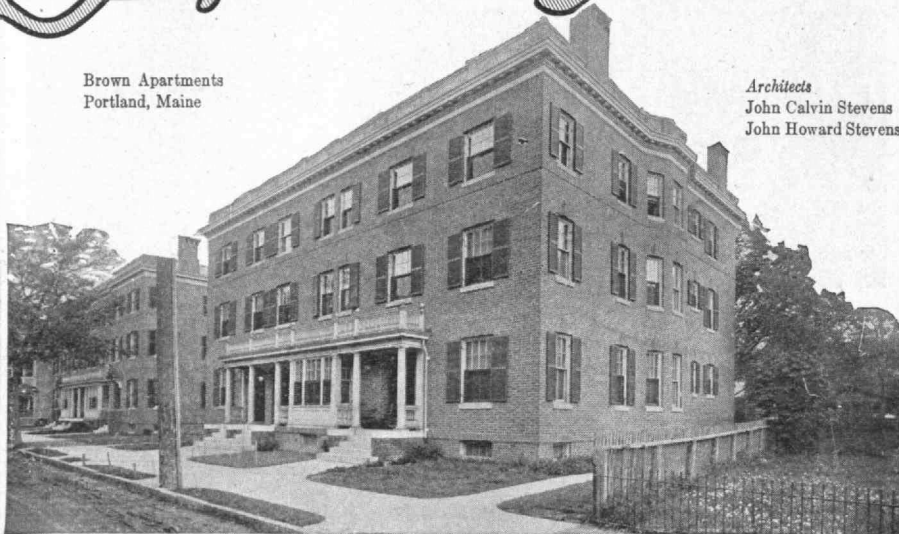
The L. S. Starrett Co.
ATHOL, MASS.

42-123

Barrett Specification Roofs

Brown Apartments
Portland, Maine

Architects
John Calvin Stevens
John Howard Stevens



Economical on Small Roofs, Too

WE have been advertising Barrett Specification Roofs with illustrations of enormous buildings and manufacturing plants where the roof areas run as high as a million square feet. In such cases, scientific estimates of the unit cost are made, that is, the cost per square foot per year of service. Such calculations simply compel the adoption of this type of roofing.

The owner of an ordinary building, like that illustrated above, with a roof area of a few thousand square feet, also saves money by adopting Barrett Specification Roofs.

There is very little difference in unit cost between a big roof and a little one of this type, and the slight difference is completely submerged in the big gap between the cost of this and the next most economical roofing—i.e. Barrett Specification Roofs are so much more economical per year of service than any other kind that a simple examination of the figures would compel their use if they cost 50% more than they do.

As manufacturers of coal tar pitch and felt, we are interested in the success of this type of roofing. We therefore have made the Barrett Specification standard in the trade in order to protect owners and architects against poor workmanship and materials and insure maximum service at minimum cost.

Copy of The Barrett Specification will be sent free on request.

BARRETT MANUFACTURING COMPANY

New York Chicago Philadelphia Boston St. Louis Cleveland Pittsburgh Cincinnati
Kansas City Minneapolis Seattle Corey, Ala.

THE PATERSON MFG. CO., Ltd.—Montreal Toronto Winnipeg Vancouver St. John, N. B. Halifax, N. S.

Special Note

We advise incorporating in plans the full wording of The Barrett Specification, in order to avoid any misunderstanding.

If any abbreviated form is desired however, the following is suggested:

ROOFING—Shall be a Barrett Specification Roof laid as directed in printed Specification, revised August 15, 1911, using the materials specified, and subject to the inspection requirement.



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Capital \$6,000,000

Surplus \$8,000,000

RECEIVES individual and commercial accounts, pays interest on balances, makes loans on approved security and transacts a general banking business in all its details.

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